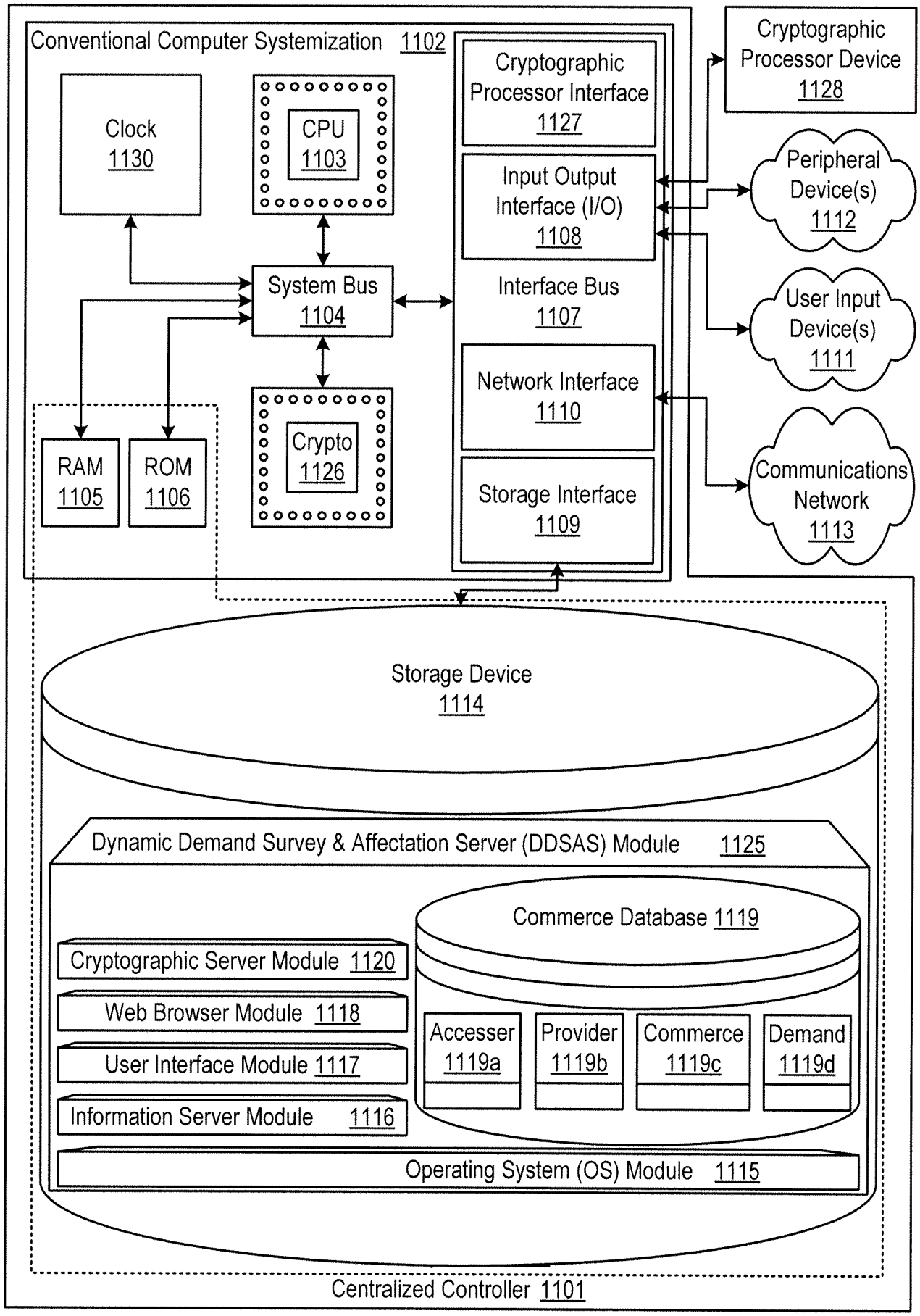
Conventional Computer Systemization 1102
Clock 1130
CPU 1103
System Bus 1104
RAM 1105
ROM 1106
Crypto 1126
Cryptographic Processor Interface 1127
Input Output Interface (I/O) 1108
Interface Bus 1107
Network Interface 1110
Storage Interface 1109
Cryptographic Processor Device 1128
Peripheral Device(s) 1112
User Input Device(s) 1111
Communications Network 1113
Storage Device 1114
Dynamic Demand Survey & Affectation Server (DDSAS) Module 1125
Commerce Database 1119
Cryptographic Server Module 1120
Web Browser Module 1118
User Interface Module 1117
Information Server Module 1116
Accesser 1119a
Provider 1119b
Commerce 1119c
Demand 1119d
Operating System (OS) Module 1115
Centralized Controller 1101

Figure 1

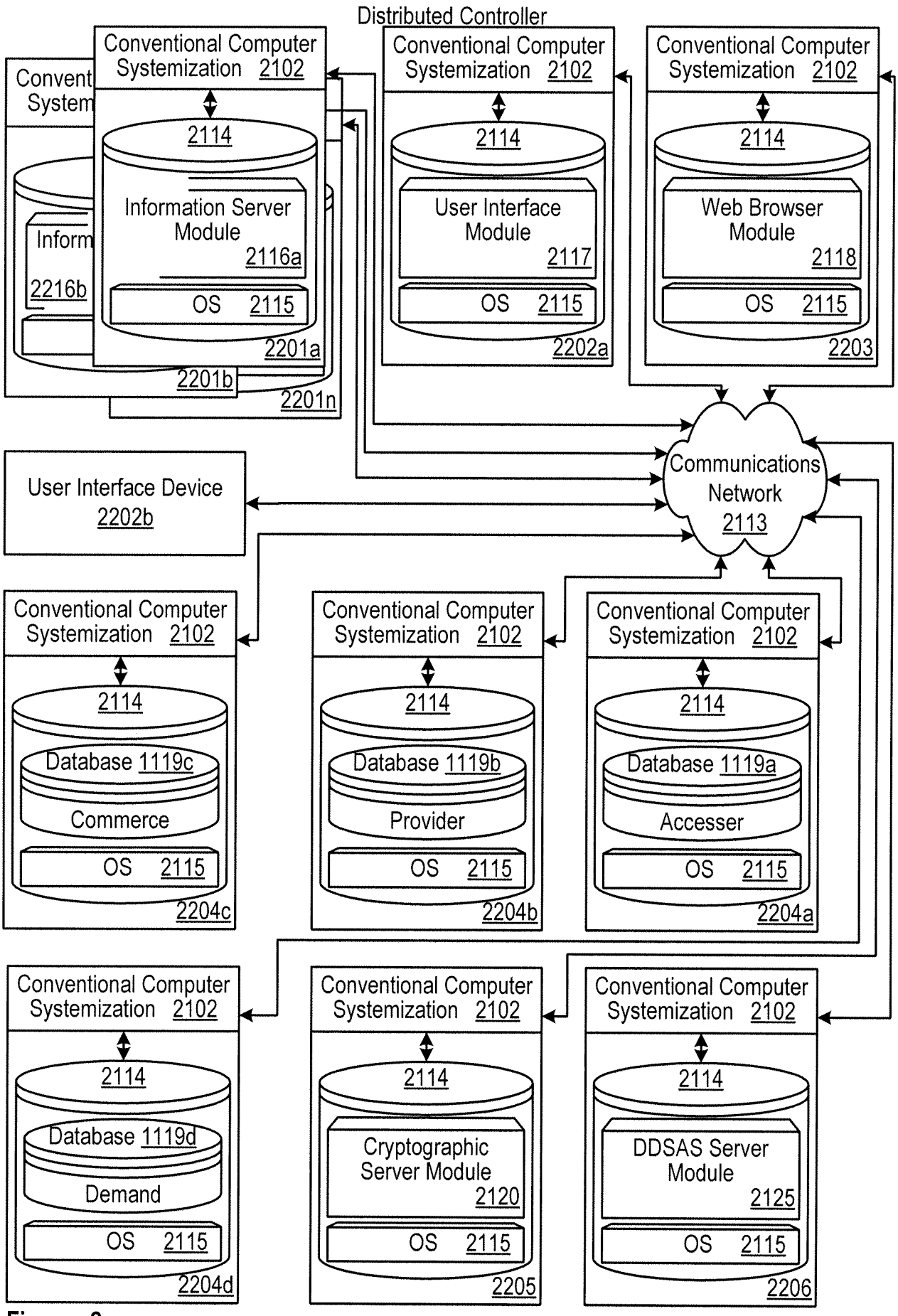
Distributed Controller
Conventional Computer Systemization 2102
2114
Information Server Module 2116a
OS 2115
2201a
2201b
2201n
Conventional Computer Systemization 2102
2114
User Interface Module 2117
OS 2115
2202a
Conventional Computer Systemization 2102
2114
Web Browser Module 2118
OS 2115
2203
Communications Network 2113
User Interface Device 2202b
Conventional Computer Systemization 2102
2114
Database 1119c
Commerce
OS 2115
2204c
Conventional Computer Systemization 2102
2114
Database 1119b
Provider
OS 2115
2204b
Conventional Computer Systemization 2102
2114
Database 1119a
Accesser
OS 2115
2204a
Conventional Computer Systemization 2102
2114
Database 1119d
Demand
OS 2115
2204d
Conventional Computer Systemization 2102
2114
Cryptographic Server Module 2120
OS 2115
2205
Conventional Computer Systemization 2102
2114
DDSAS Server Module 2125
OS 2115
2206

Figure 2

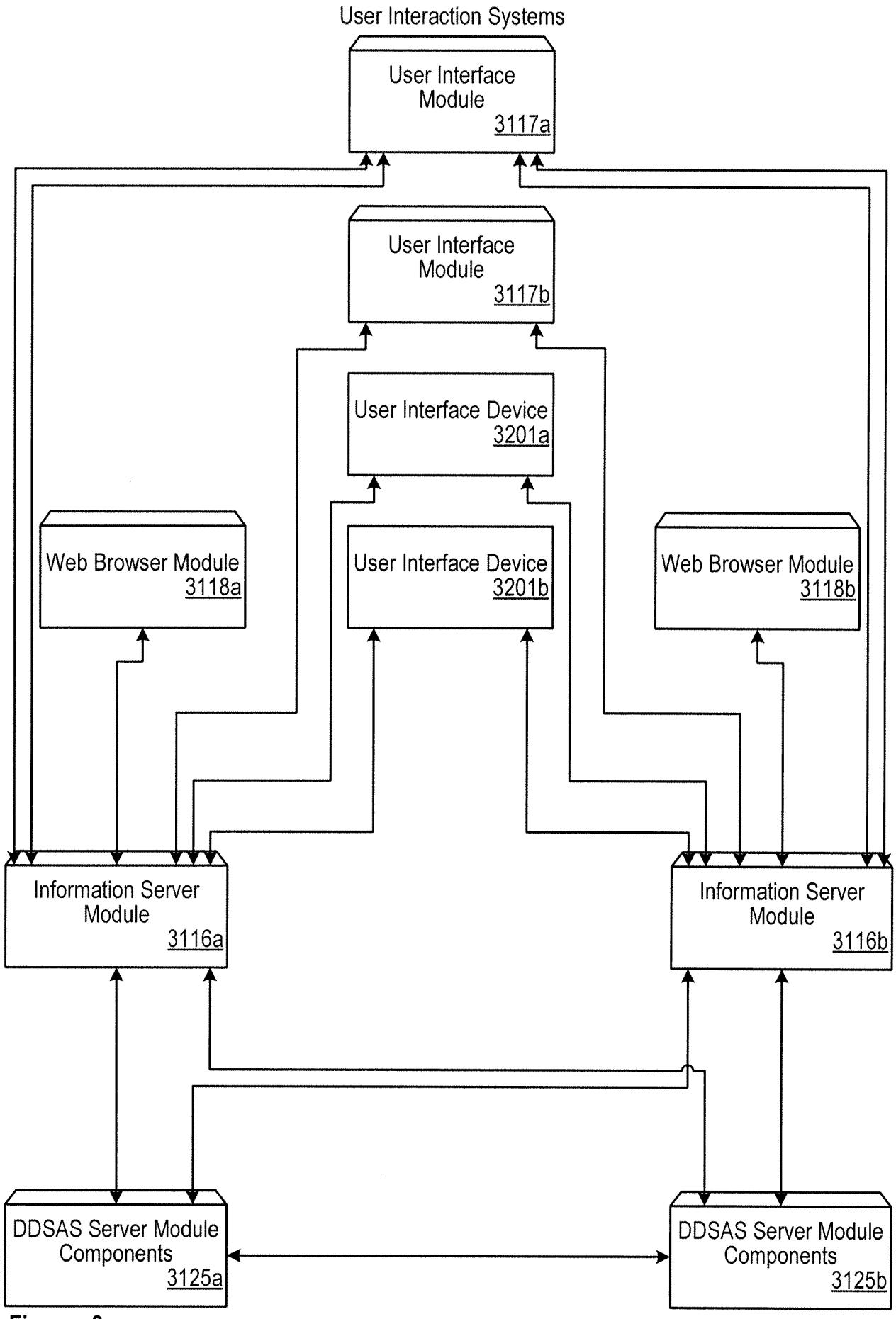
User Interaction Systems
User Interface Module 3117a
User Interface Module 3117b
User Interface Device 3201a
User Interface Device 3201b
Web Browser Module 3118a
Web Browser Module 3118b
Information Server Module 3116a
Information Server Module 3116b
DDSAS Server Module Components 3125a
DDSAS Server Module Components 3125b

Figure 3

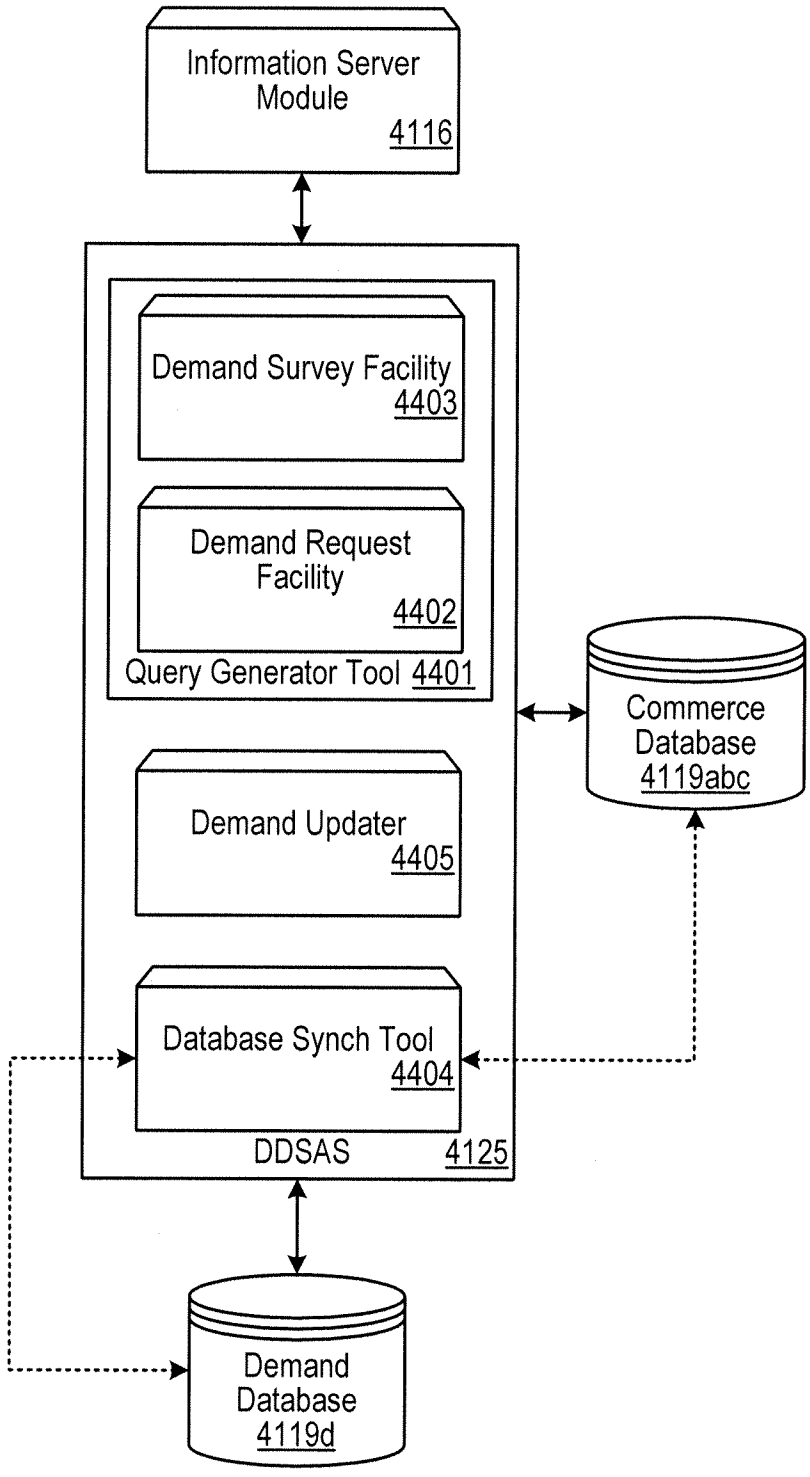
Information Server Module
4116
Demand Survey Facility
4403
Demand Request Facility
4402
Query Generator Tool 4401
Commerce Database
4119abc
Demand Updater
4405
Database Synch Tool
4404
DDSAS
4125
Demand Database
4119d

Figure 4

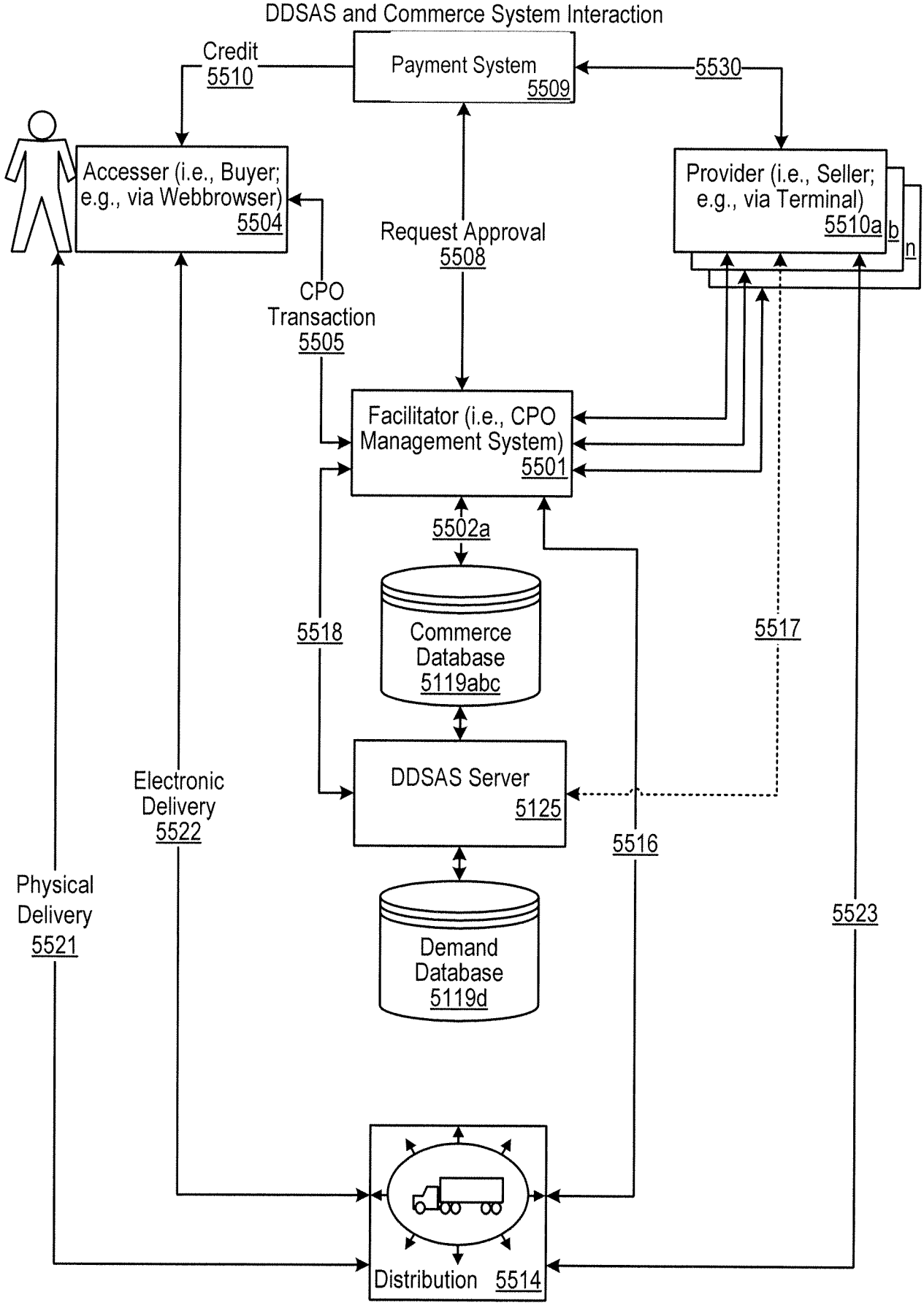
DDSAS and Commerce System Interaction
Credit
5510
Payment System
5509
5530
Accesser (i.e., Buyer; e.g., via Webbrowser)
5504
Provider (i.e., Seller; e.g., via Terminal)
5510a
b
n
Request Approval
5508
CPO
Transaction
5505
Facilitator (i.e., CPO Management System)
5501
5502a
Commerce Database
5119abc
5518
5517
DDSAS Server
5125
Electronic Delivery
5522
5516
Physical Delivery
5521
5523
Demand Database
5119d
Distribution
5514

Figure 5

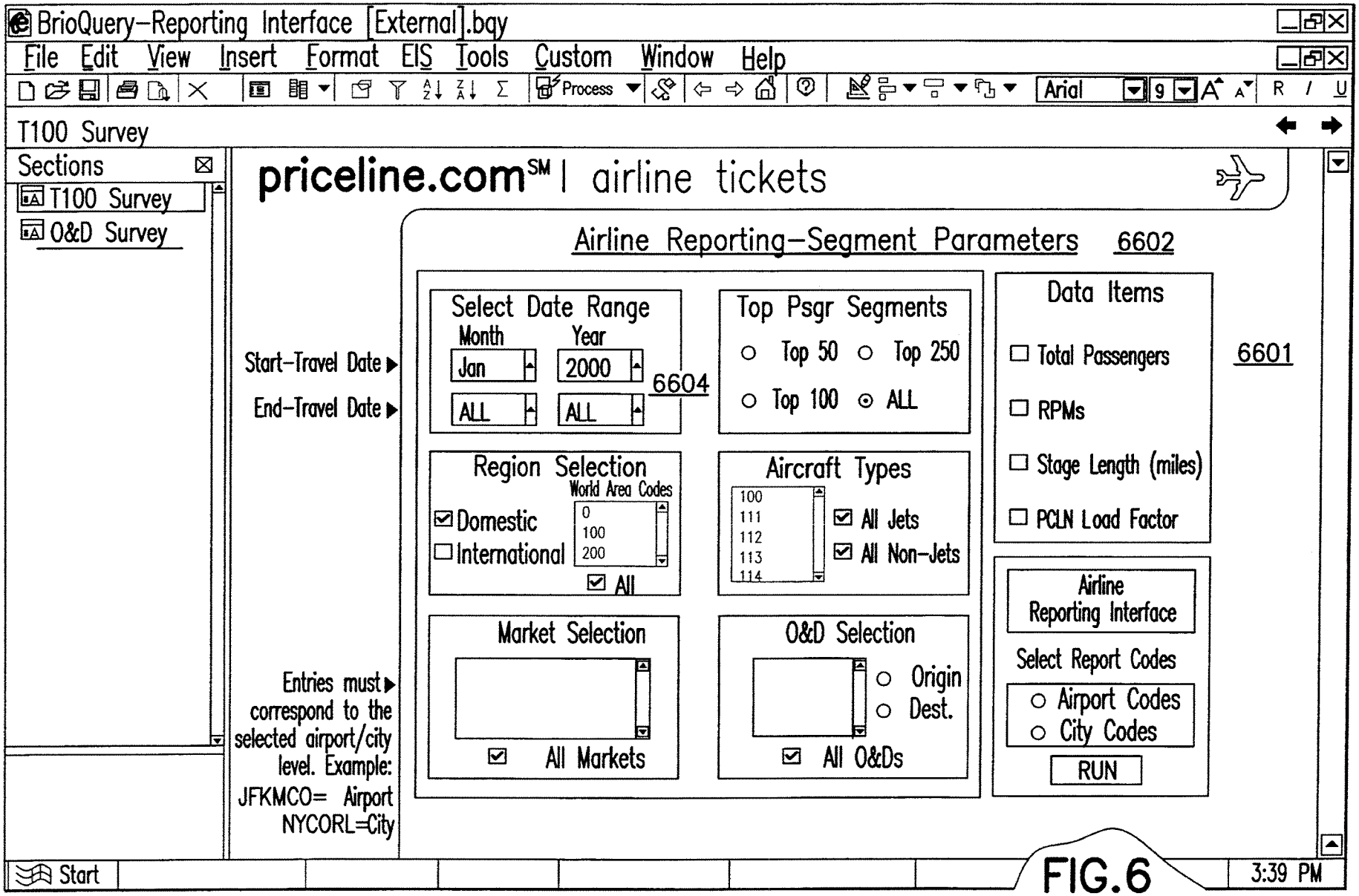
BrioQuery–Reporting Interface [External].bqy
File Edit View Insert Format EIS Tools Custom Window Help
Process
Arial
9
R I U
T100 Survey
Sections
T100 Survey
O&D Survey
priceline.com℠ | airline tickets
Airline Reporting–Segment Parameters 6602
Select Date Range
Month
Year
Start–Travel Date
End–Travel Date
Jan
2000
ALL
ALL
6604
Top Psgr Segments
Top 50
Top 250
Top 100
ALL
Data Items
Total Passengers
RPMs
Stage Length (miles)
PCLN Load Factor
6601
Region Selection
Domestic
International
World Area Codes
0
100
200
All
Aircraft Types
100
111
112
113
114
All Jets
All Non–Jets
Market Selection
All Markets
O&D Selection
Origin
Dest.
All O&Ds
Airline Reporting Interface
Select Report Codes
Airport Codes
City Codes
RUN
Entries must correspond to the selected airport/city level. Example:
JFKMCO= Airport
NYCORL=City
Start
3:39 PM

FIG.6

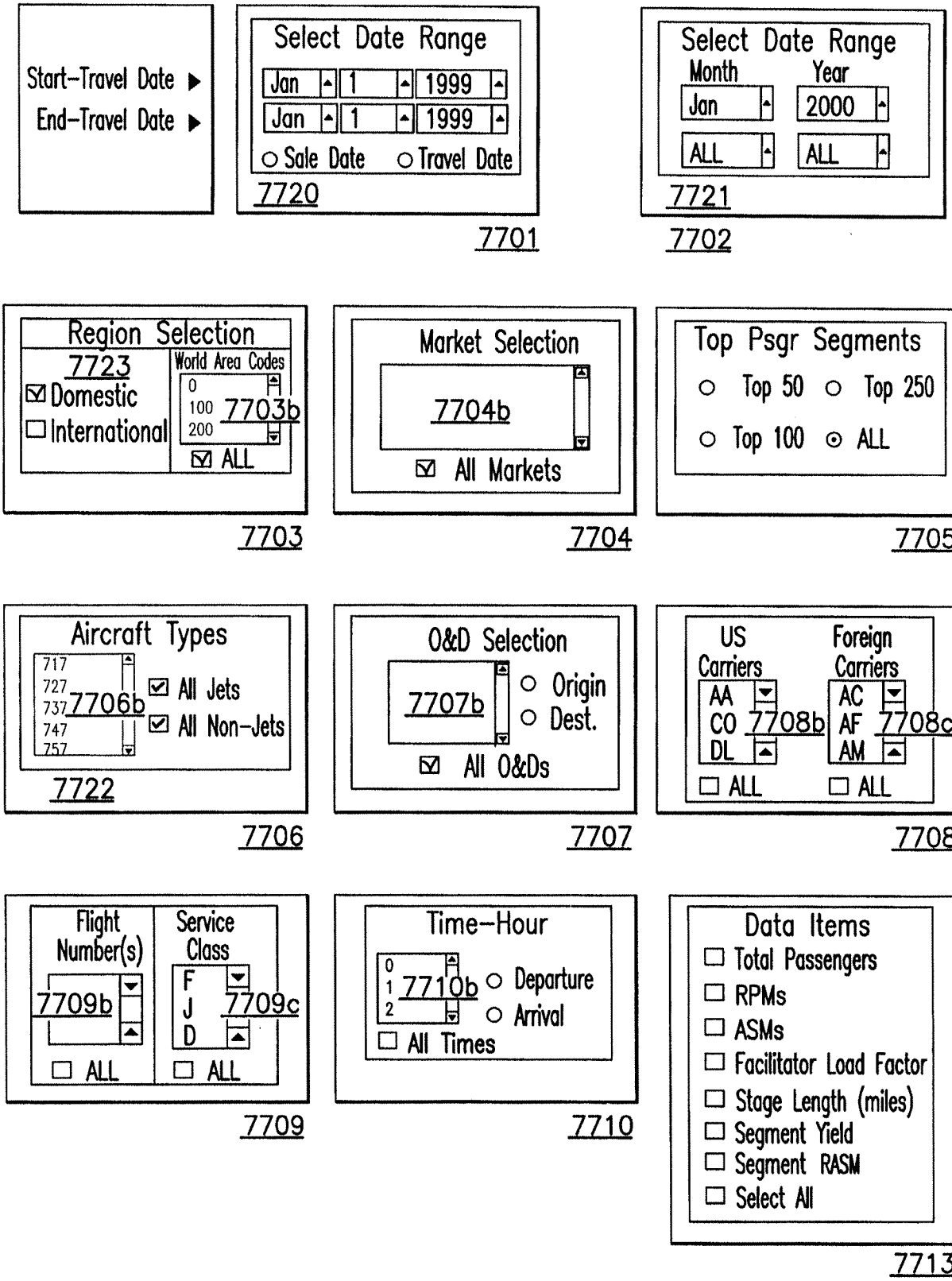

FIG.7A
FIG.7B

DSF-Facilities

FIG.7

FIG.7A

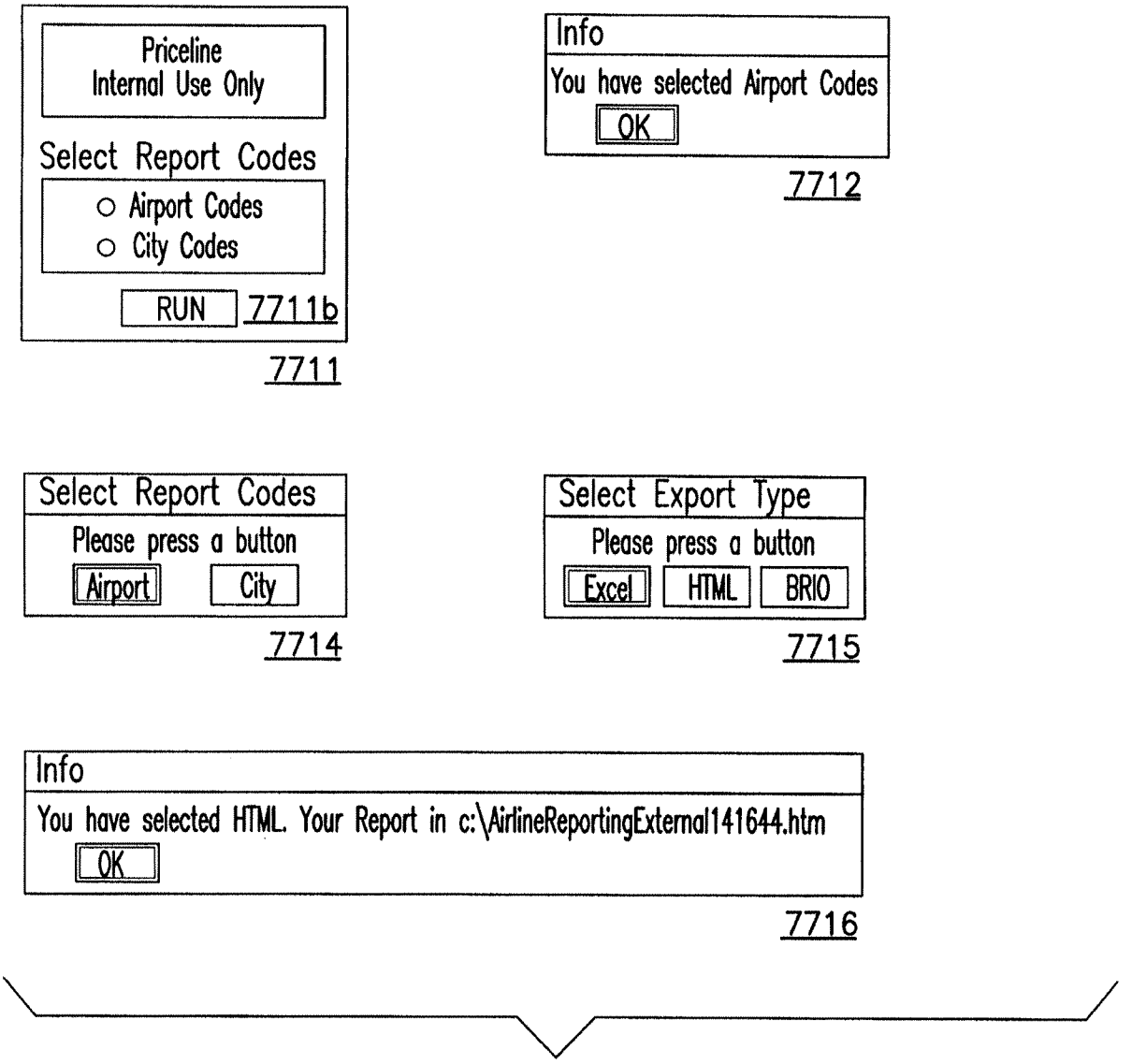
Priceline
Internal Use Only
Select Report Codes
Airport Codes
City Codes
RUN
7711b
7711
Info
You have selected Airport Codes
OK
7712
Select Report Codes
Please press a button
Airport
City
7714
Select Export Type
Please press a button
Excel
HTML
BRIO
7715
Info
You have selected HTML. Your Report in c:\AirlineReportingExternal141644.htm
OK
7716

FIG.7B

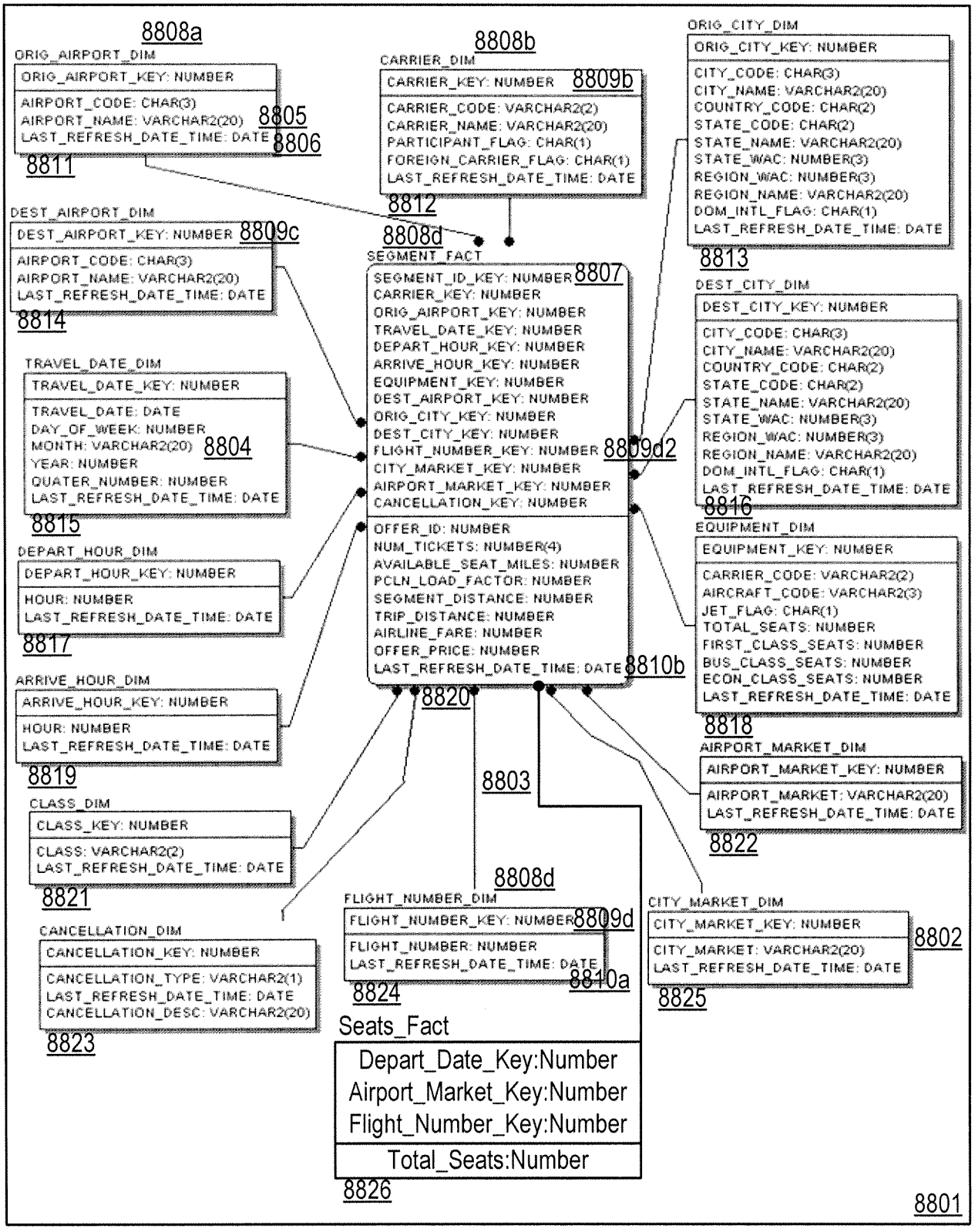
Database Survey Schema Interactions
8808a
ORIG_AIRPORT_DIM
ORIG_AIRPORT_KEY: NUMBER
AIRPORT_CODE: CHAR(3)
AIRPORT_NAME: VARCHAR2(20)
LAST_REFRESH_DATE_TIME: DATE
8805
8806
8811
8808b
CARRIER_DIM
CARRIER_KEY: NUMBER
8809b
CARRIER_CODE: VARCHAR2(2)
CARRIER_NAME: VARCHAR2(20)
PARTICIPANT_FLAG: CHAR(1)
FOREIGN_CARRIER_FLAG: CHAR(1)
LAST_REFRESH_DATE_TIME: DATE
8812
8808d
ORIG_CITY_DIM
ORIG_CITY_KEY: NUMBER
CITY_CODE: CHAR(3)
CITY_NAME: VARCHAR2(20)
COUNTRY_CODE: CHAR(2)
STATE_CODE: CHAR(2)
STATE_NAME: VARCHAR2(20)
STATE_WAC: NUMBER(3)
REGION_WAC: NUMBER(3)
REGION_NAME: VARCHAR2(20)
DOM_INTL_FLAG: CHAR(1)
LAST_REFRESH_DATE_TIME: DATE
8813
DEST_AIRPORT_DIM
DEST_AIRPORT_KEY: NUMBER
8809c
AIRPORT_CODE: CHAR(3)
AIRPORT_NAME: VARCHAR2(20)
LAST_REFRESH_DATE_TIME: DATE
8814
SEGMENT_FACT
SEGMENT_ID_KEY: NUMBER
8807
CARRIER_KEY: NUMBER
ORIG_AIRPORT_KEY: NUMBER
TRAVEL_DATE_KEY: NUMBER
DEPART_HOUR_KEY: NUMBER
ARRIVE_HOUR_KEY: NUMBER
EQUIPMENT_KEY: NUMBER
DEST_AIRPORT_KEY: NUMBER
ORIG_CITY_KEY: NUMBER
DEST_CITY_KEY: NUMBER
FLIGHT_NUMBER_KEY: NUMBER
8809d2
CITY_MARKET_KEY: NUMBER
AIRPORT_MARKET_KEY: NUMBER
CANCELLATION_KEY: NUMBER
OFFER_ID: NUMBER
NUM_TICKETS: NUMBER(4)
AVAILABLE_SEAT_MILES: NUMBER
PCLN_LOAD_FACTOR: NUMBER
SEGMENT_DISTANCE: NUMBER
TRIP_DISTANCE: NUMBER
AIRLINE_FARE: NUMBER
OFFER_PRICE: NUMBER
LAST_REFRESH_DATE_TIME: DATE
8810b
8820
DEST_CITY_DIM
DEST_CITY_KEY: NUMBER
CITY_CODE: CHAR(3)
CITY_NAME: VARCHAR2(20)
COUNTRY_CODE: CHAR(2)
STATE_CODE: CHAR(2)
STATE_NAME: VARCHAR2(20)
STATE_WAC: NUMBER(3)
REGION_WAC: NUMBER(3)
REGION_NAME: VARCHAR2(20)
DOM_INTL_FLAG: CHAR(1)
LAST_REFRESH_DATE_TIME: DATE
8816
TRAVEL_DATE_DIM
TRAVEL_DATE_KEY: NUMBER
TRAVEL_DATE: DATE
DAY_OF_WEEK: NUMBER
MONTH: VARCHAR2(20)
8804
YEAR: NUMBER
QUATER_NUMBER: NUMBER
LAST_REFRESH_DATE_TIME: DATE
8815
EQUIPMENT_DIM
EQUIPMENT_KEY: NUMBER
CARRIER_CODE: VARCHAR2(2)
AIRCRAFT_CODE: VARCHAR2(3)
JET_FLAG: CHAR(1)
TOTAL_SEATS: NUMBER
FIRST_CLASS_SEATS: NUMBER
BUS_CLASS_SEATS: NUMBER
ECON_CLASS_SEATS: NUMBER
LAST_REFRESH_DATE_TIME: DATE
8818
DEPART_HOUR_DIM
DEPART_HOUR_KEY: NUMBER
HOUR: NUMBER
LAST_REFRESH_DATE_TIME: DATE
8817
ARRIVE_HOUR_DIM
ARRIVE_HOUR_KEY: NUMBER
HOUR: NUMBER
LAST_REFRESH_DATE_TIME: DATE
8819
AIRPORT_MARKET_DIM
AIRPORT_MARKET_KEY: NUMBER
AIRPORT_MARKET: VARCHAR2(20)
LAST_REFRESH_DATE_TIME: DATE
8822
8803
CLASS_DIM
CLASS_KEY: NUMBER
CLASS: VARCHAR2(2)
LAST_REFRESH_DATE_TIME: DATE
8821
8808d
FLIGHT_NUMBER_DIM
FLIGHT_NUMBER_KEY: NUMBER
8809d
FLIGHT_NUMBER: NUMBER
LAST_REFRESH_DATE_TIME: DATE
8810a
8824
CITY_MARKET_DIM
CITY_MARKET_KEY: NUMBER
8802
CITY_MARKET: VARCHAR2(20)
LAST_REFRESH_DATE_TIME: DATE
8825
CANCELLATION_DIM
CANCELLATION_KEY: NUMBER
CANCELLATION_TYPE: VARCHAR2(1)
LAST_REFRESH_DATE_TIME: DATE
CANCELLATION_DESC: VARCHAR2(20)
8823
Seats_Fact
Depart_Date_Key:Number
Airport_Market_Key:Number
Flight_Number_Key:Number
Total_Seats:Number
8826
8801

Figure 8

Demand Survey Facility Flow

Airline Reporting Tools (External)
T100 Survey / O&D Survey

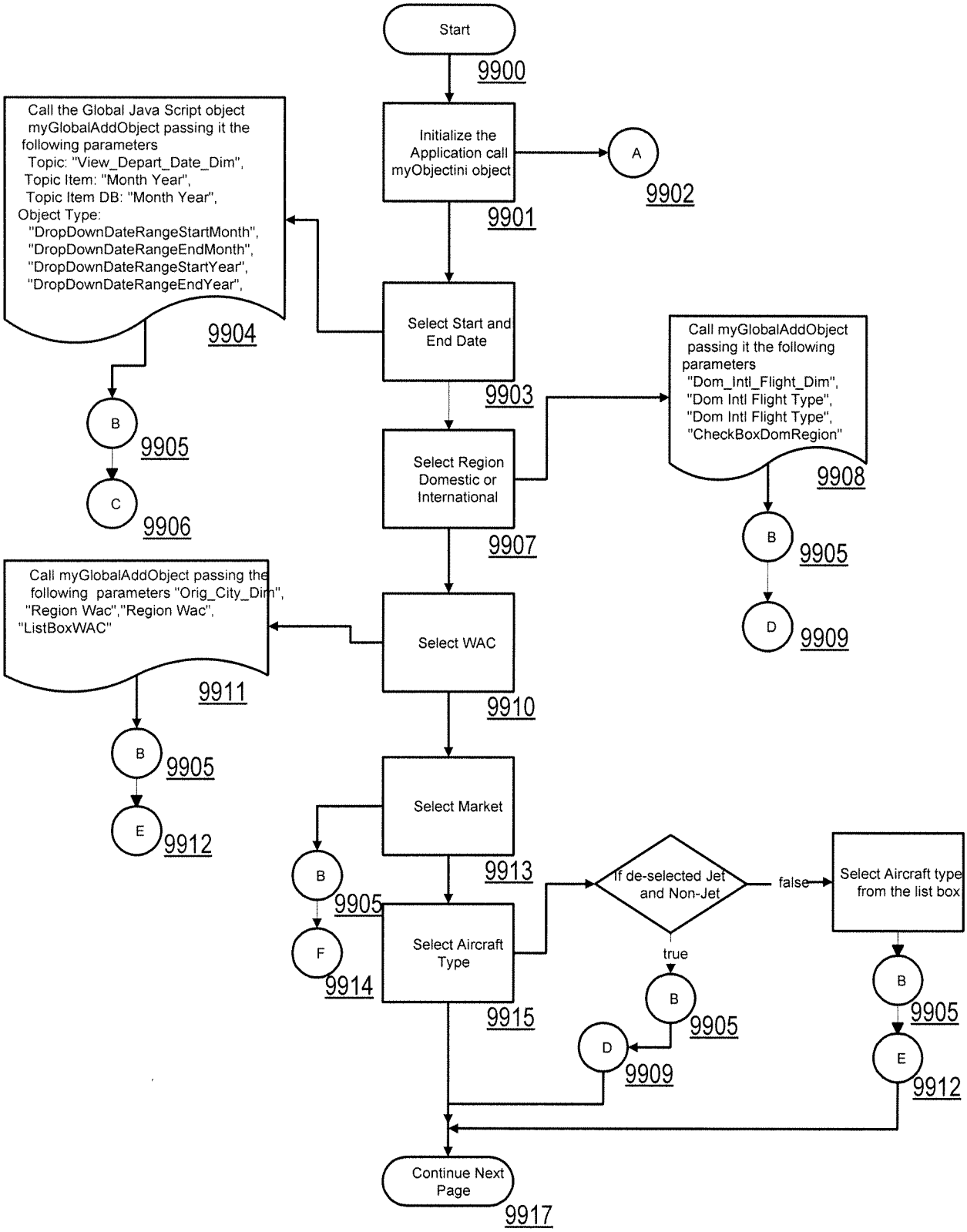

Figure 9Z

Demand Survey Facility Flow Continued

Airline Reporting Tools (External)
T100 Survey / O&D Survey

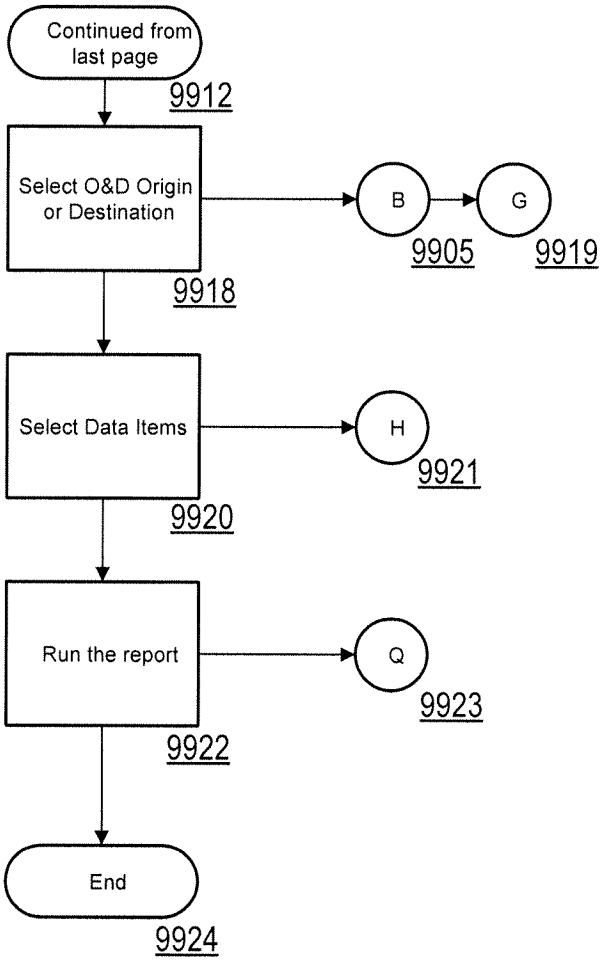

Figure 9Z2

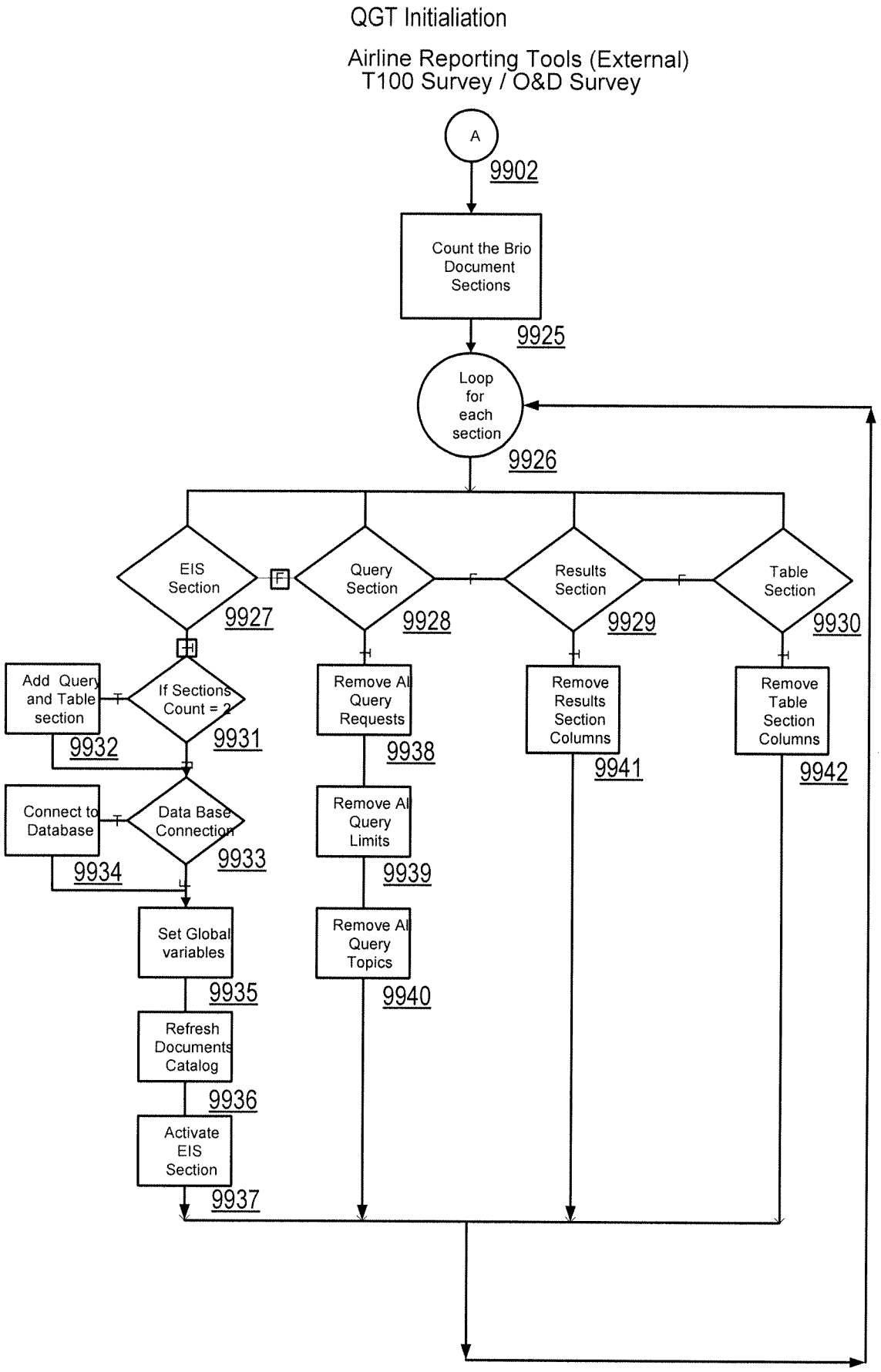
QGT Initialiation
Airline Reporting Tools (External)
T100 Survey / O&D Survey
A
9902
Count the Brio Document Sections
9925
Loop for each section
9926
EIS Section
9927
Query Section
9928
Results Section
9929
Table Section
9930
Add Query and Table section
9932
If Sections Count = 2
9931
Connect to Database
9934
Data Base Connection
9933
Set Global variables
9935
Refresh Documents Catalog
9936
Activate EIS Section
9937
Remove All Query Requests
9938
Remove All Query Limits
9939
Remove All Query Topics
9940
Remove Results Section Columns
9941
Remove Table Section Columns
9942

Figure 9A

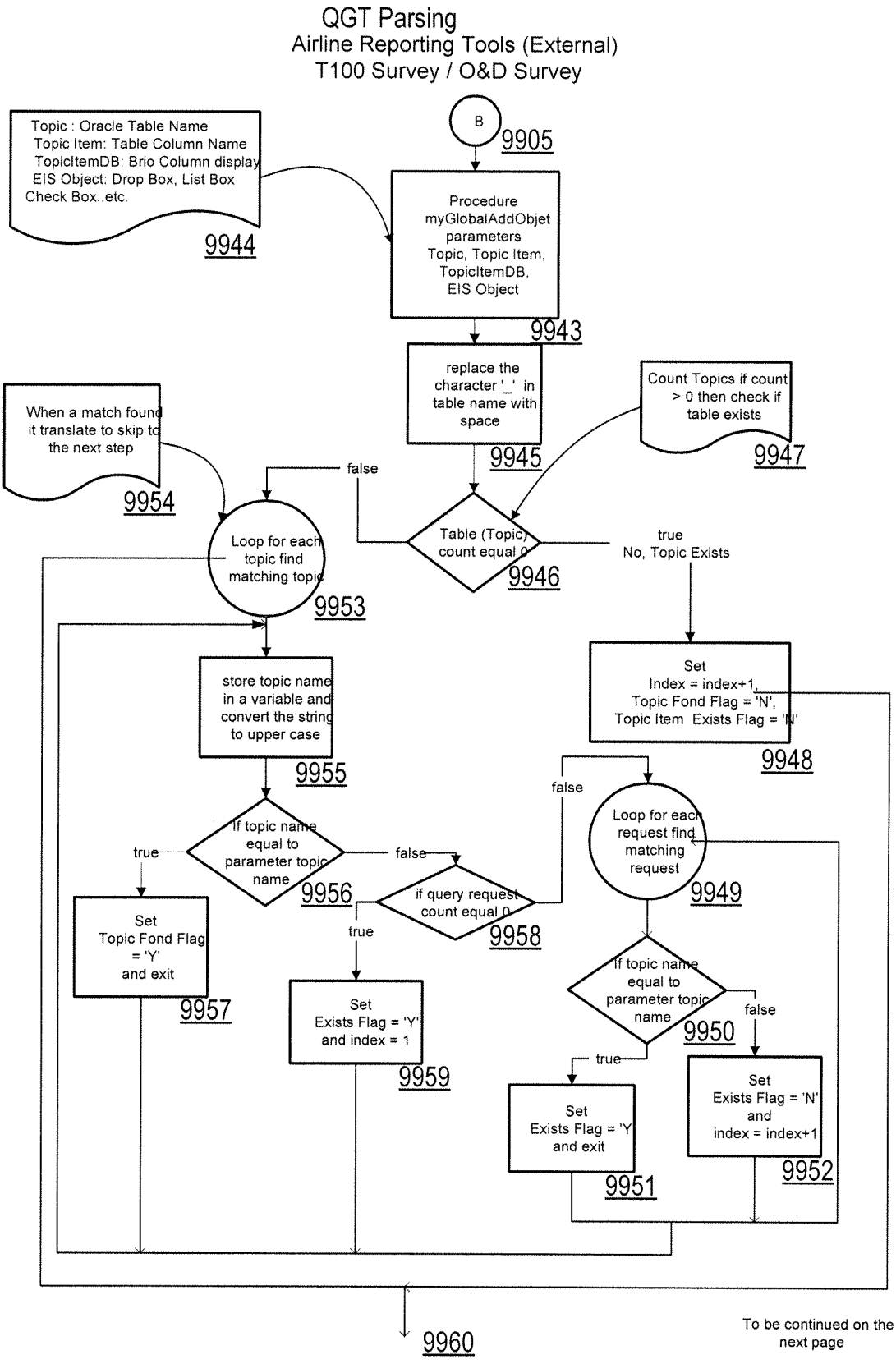
QGT Parsing
Airline Reporting Tools (External)
T100 Survey / O&D Survey
Topic : Oracle Table Name
Topic Item: Table Column Name
TopicItemDB: Brio Column display
EIS Object: Drop Box, List Box
Check Box..etc.
9944
B
9905
Procedure myGlobalAddObjet parameters Topic, Topic Item, TopicItemDB, EIS Object
9943
replace the character '_' in table name with space
9945
Count Topics if count > 0 then check if table exists
9947
When a match found it translate to skip to the next step
9954
false
Loop for each topic find matching topic
9953
Table (Topic) count equal 0
9946
true
No, Topic Exists
store topic name in a variable and convert the string to upper case
9955
Set Index = index+1, Topic Fond Flag = 'N', Topic Item Exists Flag = 'N'
9948
false
Loop for each request find matching request
9949
If topic name equal to parameter topic name
9956
true
false
Set Topic Fond Flag = 'Y' and exit
9957
if query request count equal 0
9958
true
Set Exists Flag = 'Y' and index = 1
9959
If topic name equal to parameter topic name
9950
false
true
Set Exists Flag = 'Y and exit
9951
Set Exists Flag = 'N' and index = index+1
9952
9960
To be continued on the next page

Figure 9B

QGT Parsing Continued

Airline Reporting Tools (External)
T100 Survey / O&D Survey

Continue from previous page

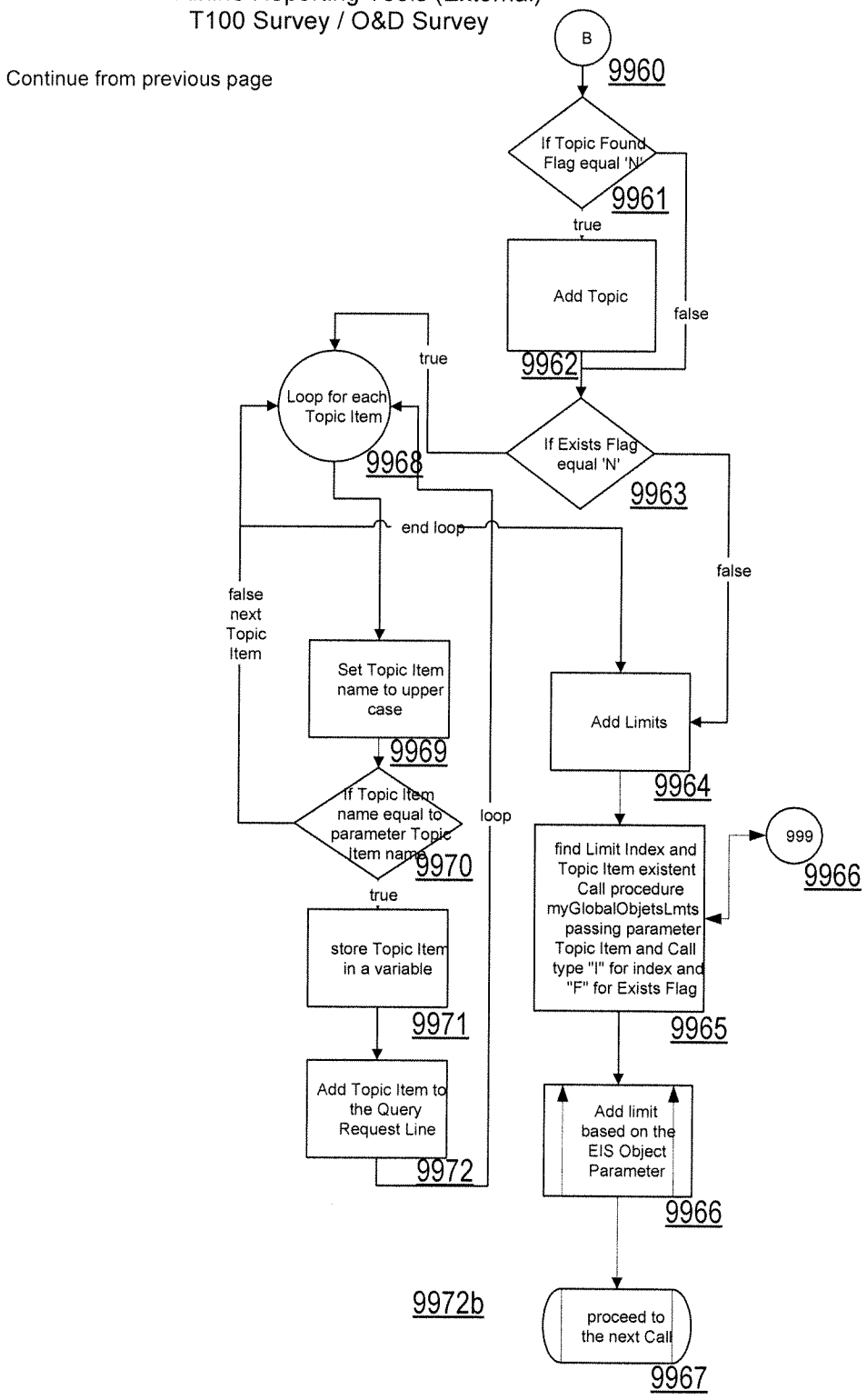

Figure 9B2

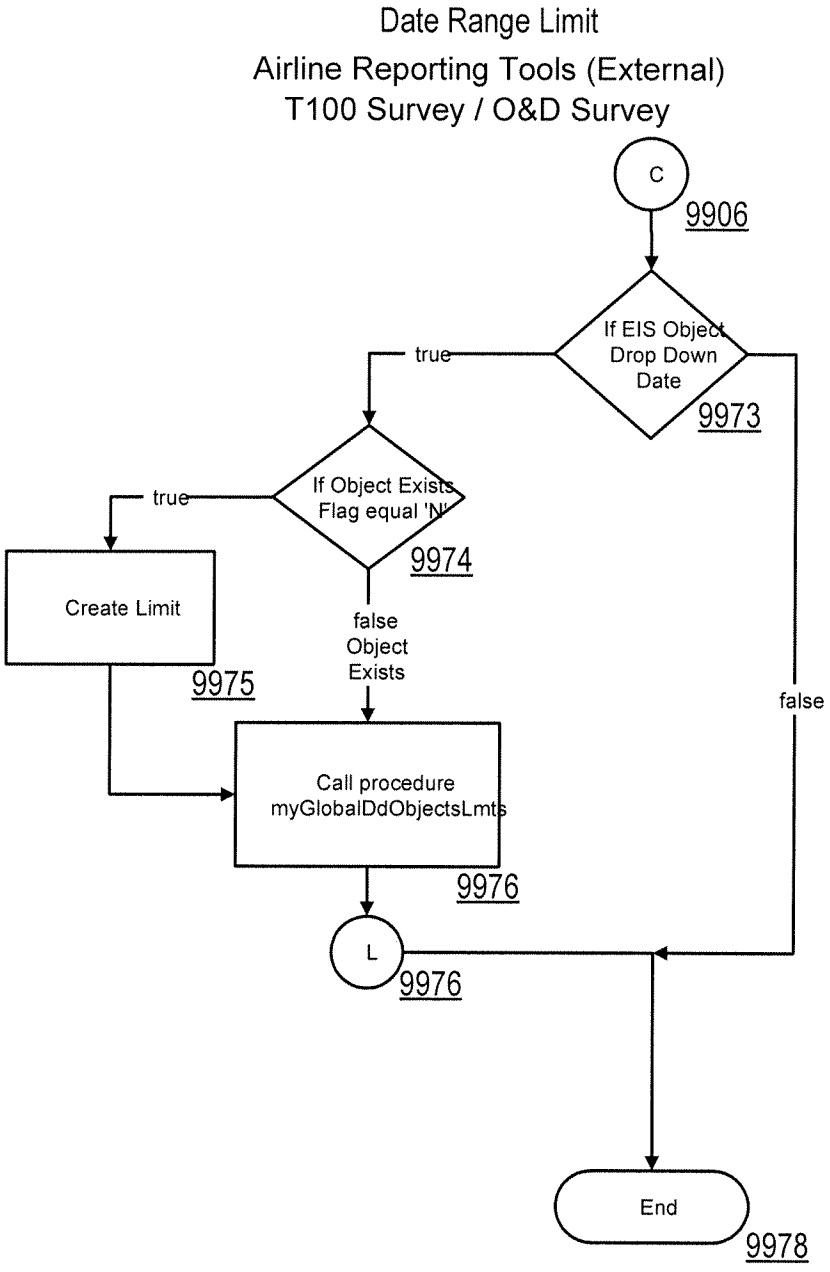
Date Range Limit
Airline Reporting Tools (External)
T100 Survey / O&D Survey
C
9906
If EIS Object Drop Down Date
9973
true
false
If Object Exists Flag equal 'N'
9974
true
Create Limit
9975
false Object Exists
Call procedure myGlobalDdObjectsLmts
9976
L
9976
End
9978

Figure 9C

Check Box Limit
Airline Reporting Tools (External)
T100 Survey / O&D Survey

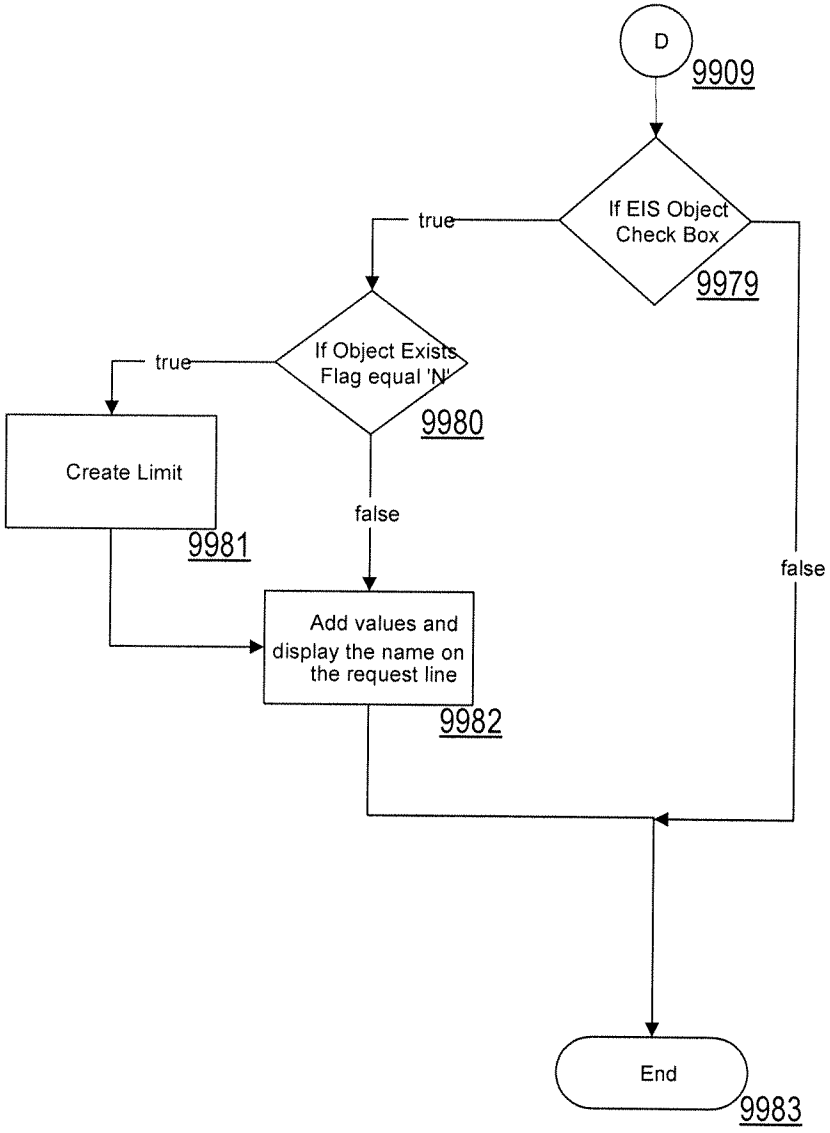

Figure 9D

List Box Limit

Airline Reporting Tools (External)
T100 Survey / O&D Survey

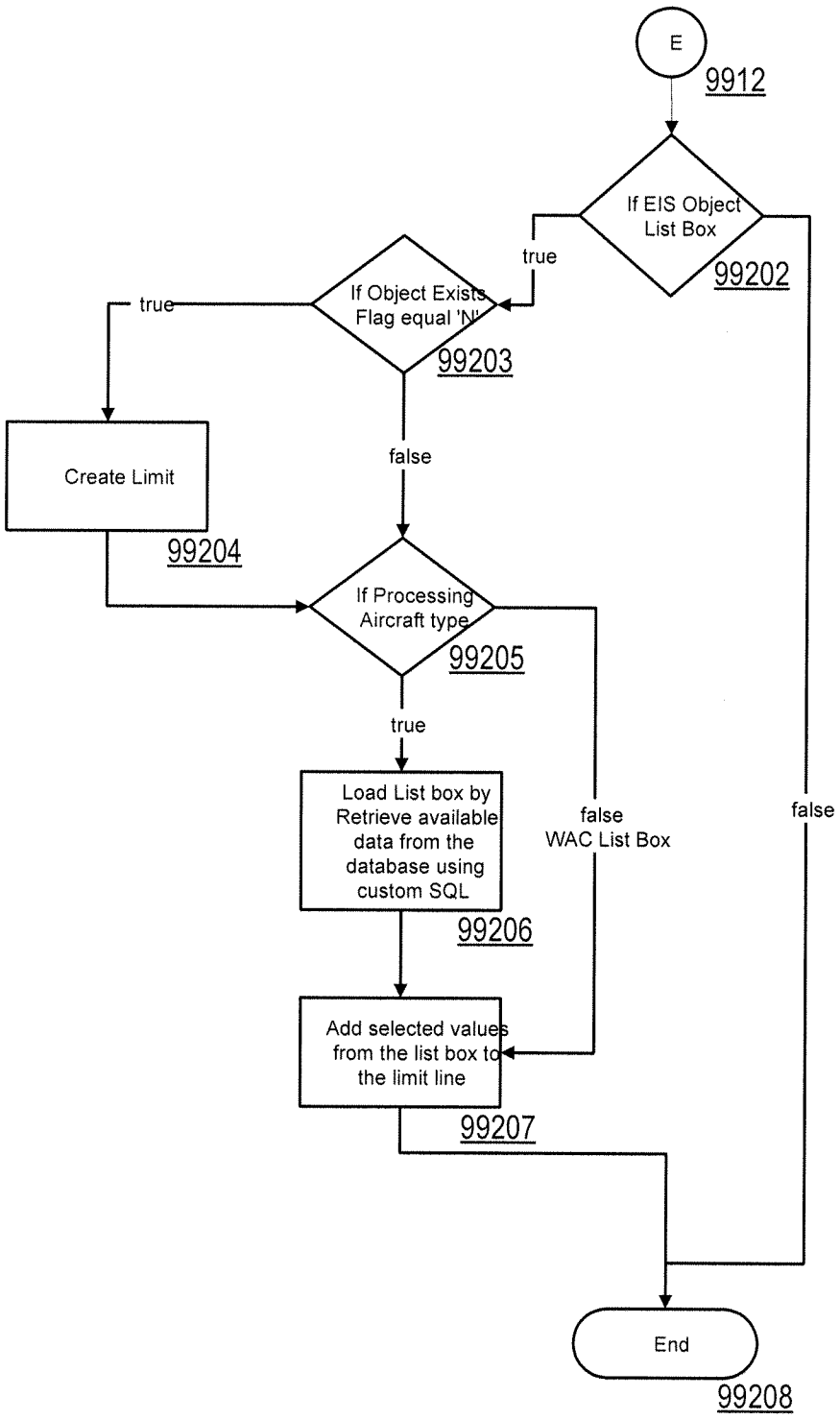

Figure 9E

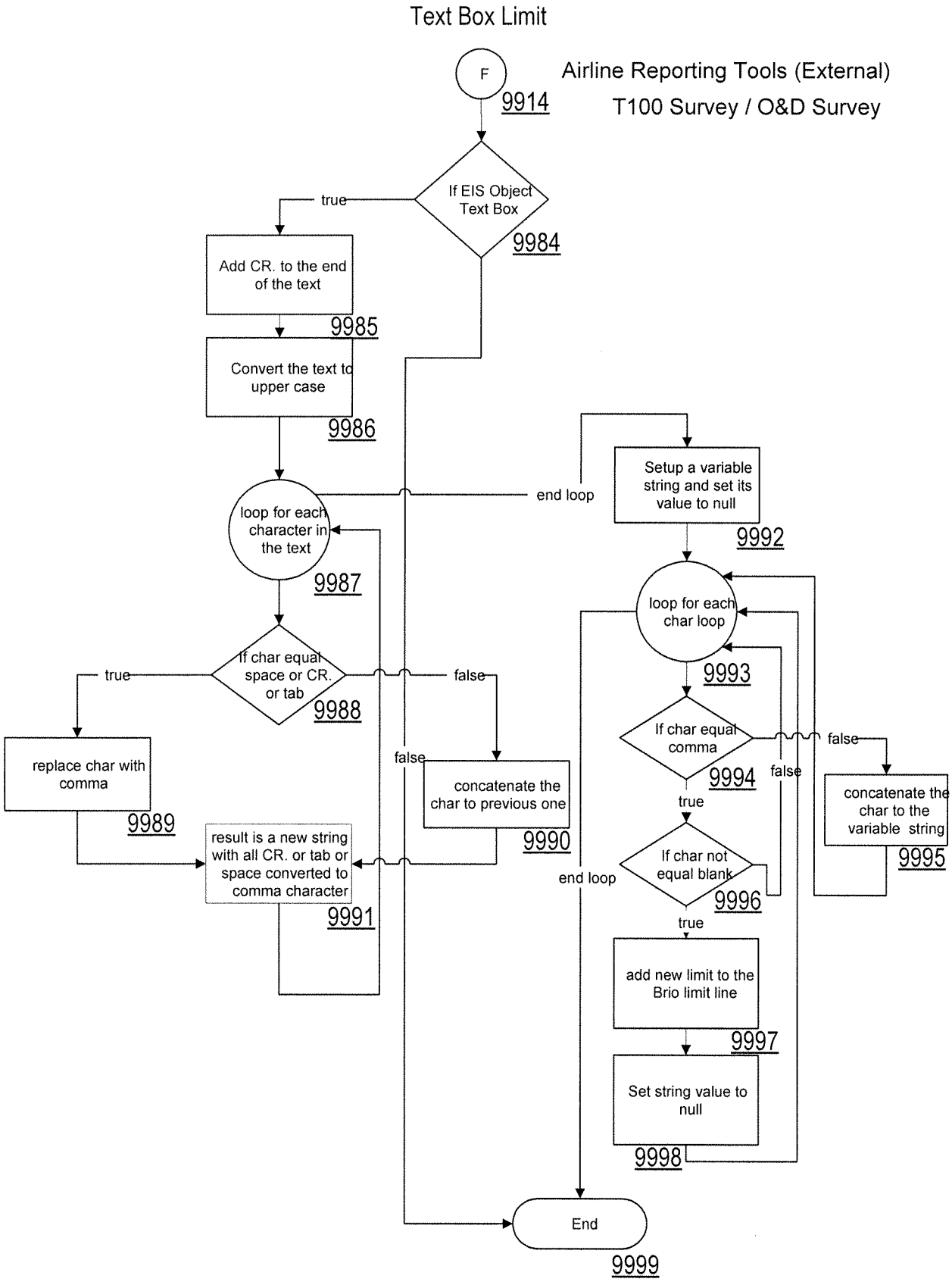
Text Box Limit
F
9914
Airline Reporting Tools (External)
T100 Survey / O&D Survey
If EIS Object Text Box
9984
true
Add CR. to the end of the text
9985
Convert the text to upper case
9986
loop for each character in the text
9987
end loop
Setup a variable string and set its value to null
9992
If char equal space or CR. or tab
9988
true
false
replace char with comma
9989
false
concatenate the char to previous one
9990
result is a new string with all CR. or tab or space converted to comma character
9991
loop for each char loop
9993
If char equal comma
9994
false
true
concatenate the char to the variable string
9995
If char not equal blank
9996
end loop
true
add new limit to the Brio limit line
9997
Set string value to null
9998
End
9999

Figure 9F

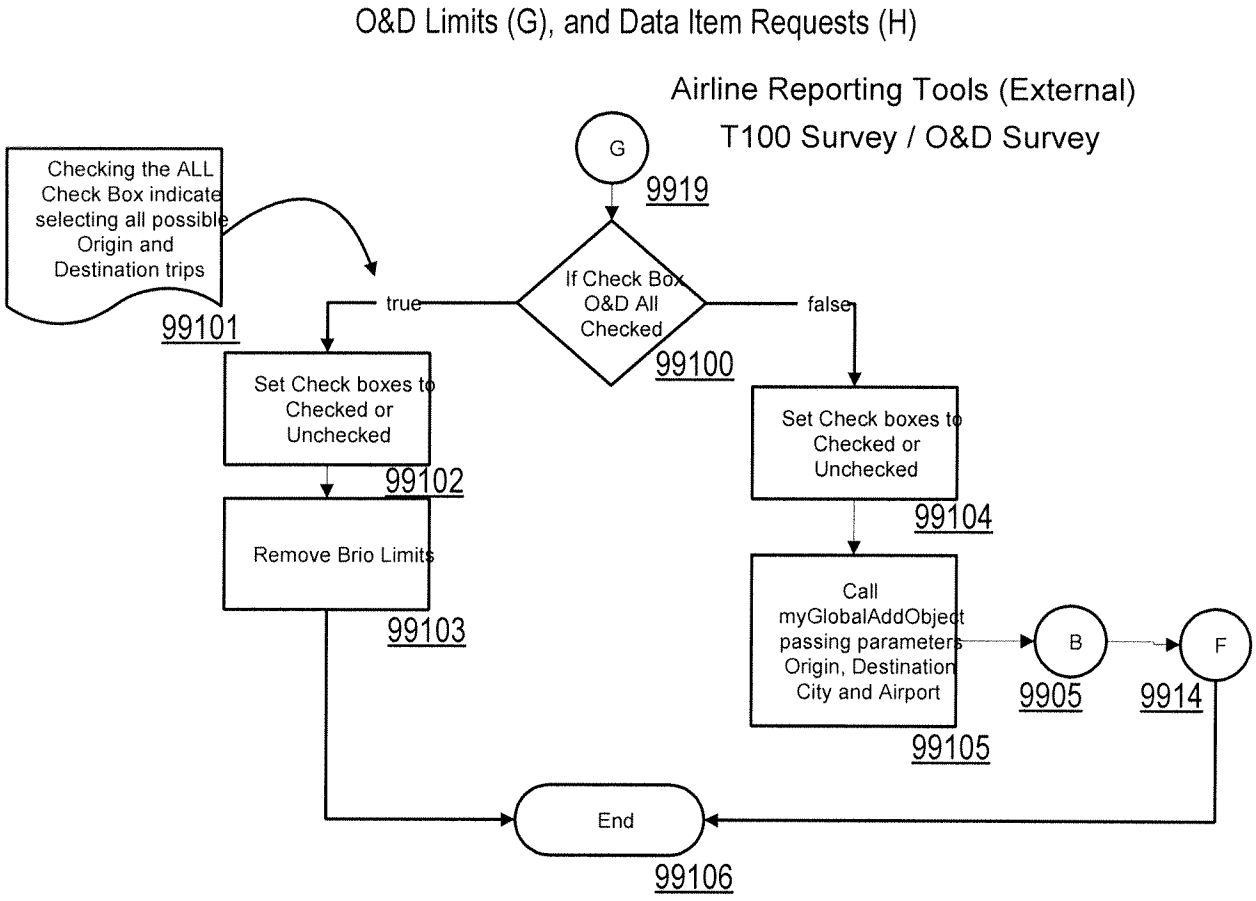

Figure 9G

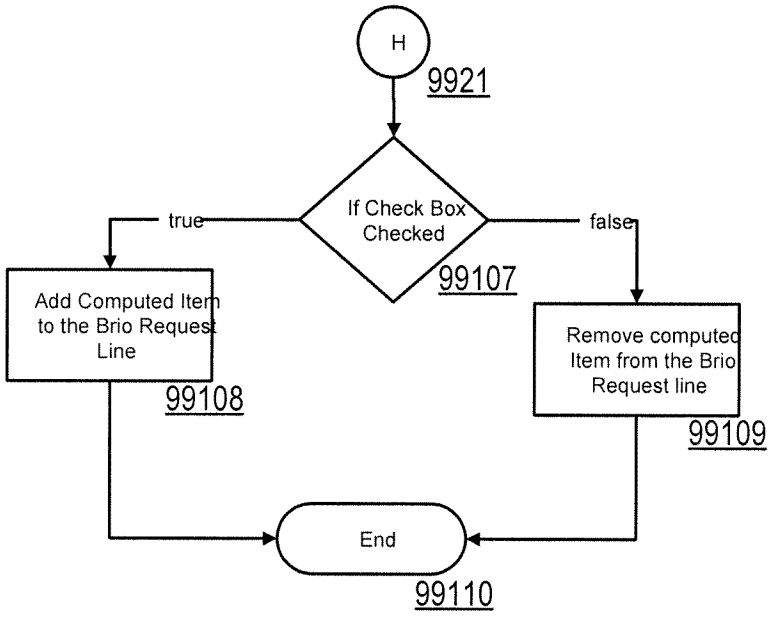

Figure 9H

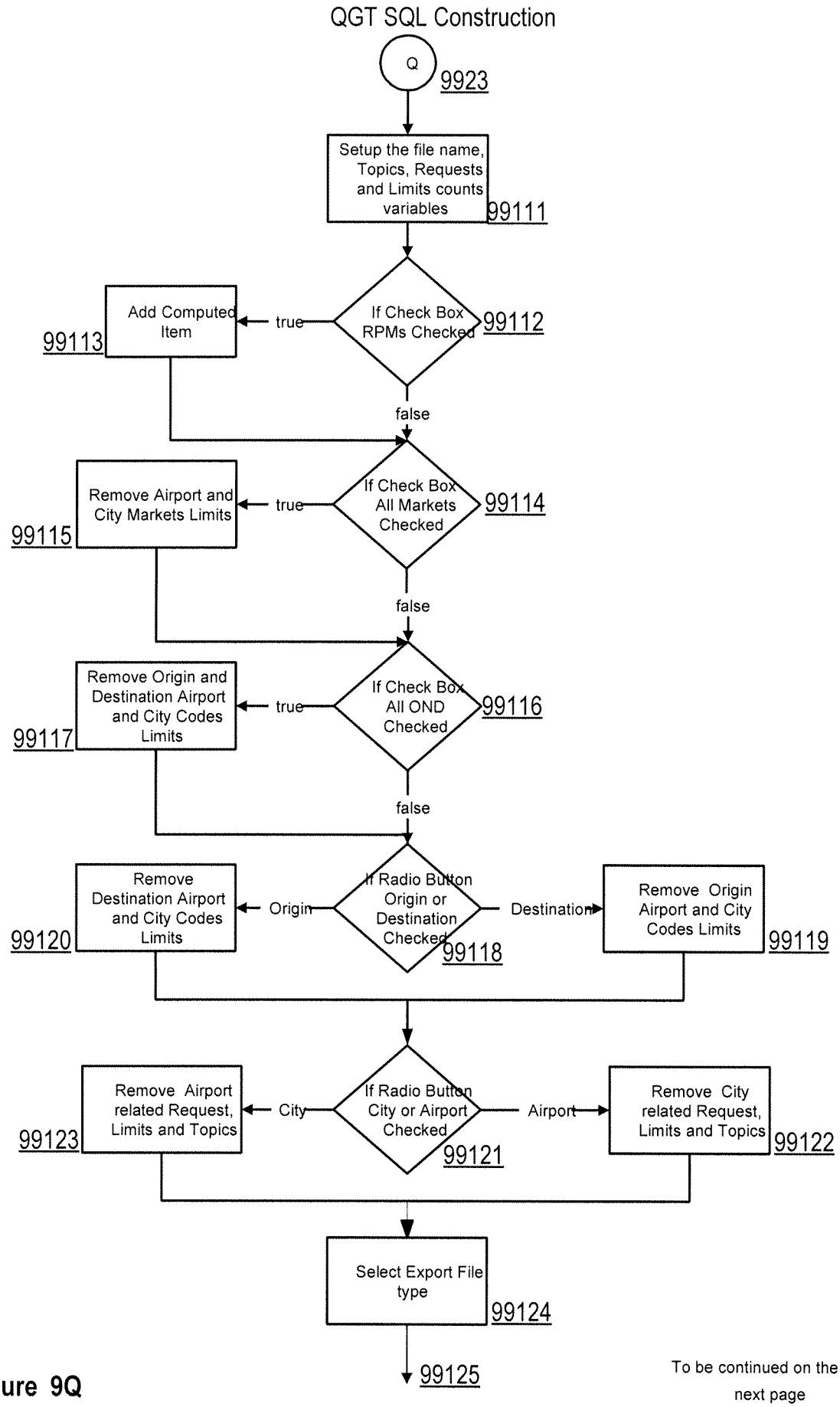

Figure 9Q

To be continued on the next page

QGT SQL Construction Continued

Airline Reporting Tools (External)

T100 Survey / O&D Survey

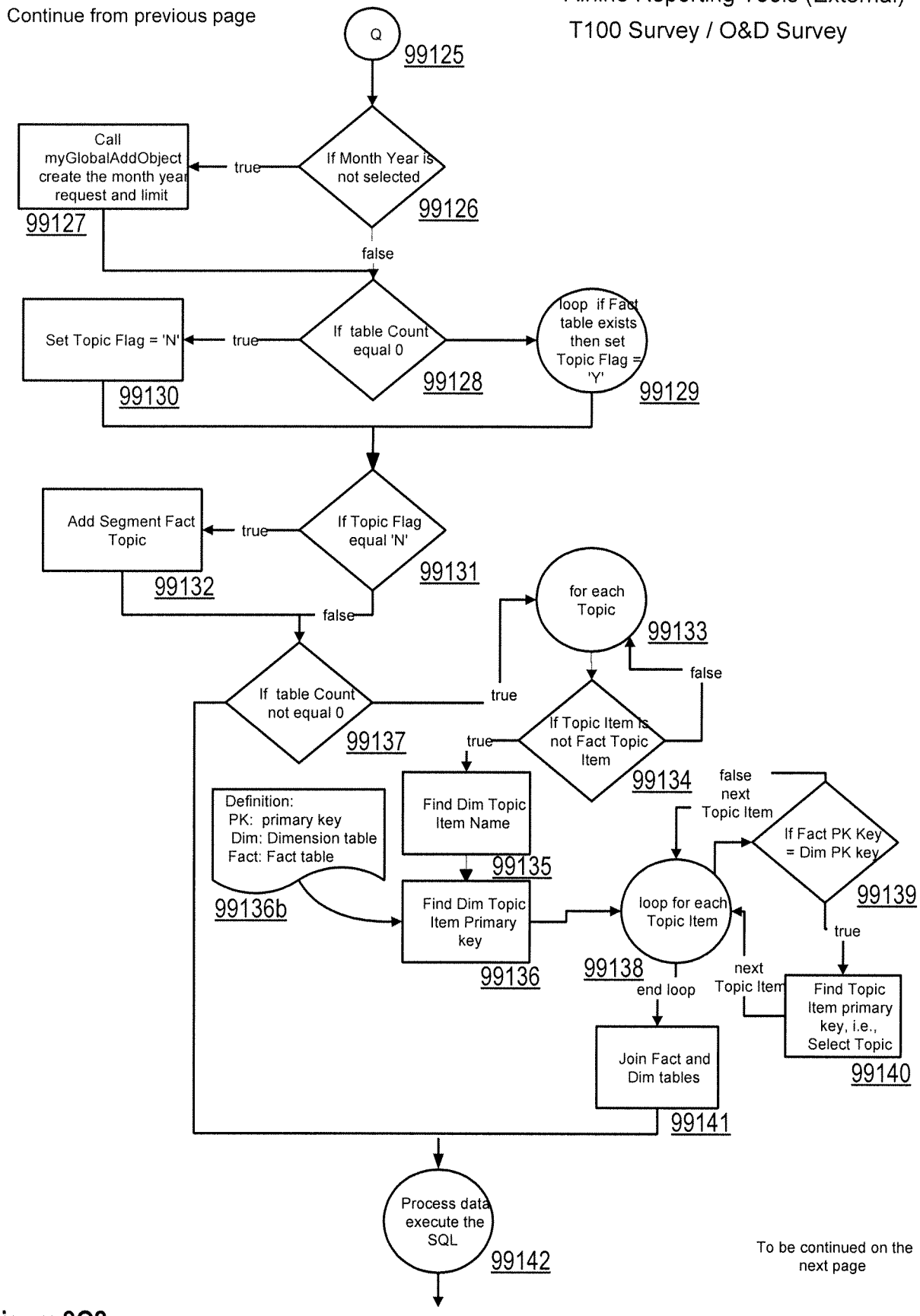

Figure 9Q2

QGT SQL Construction Continued

Continue from previous page

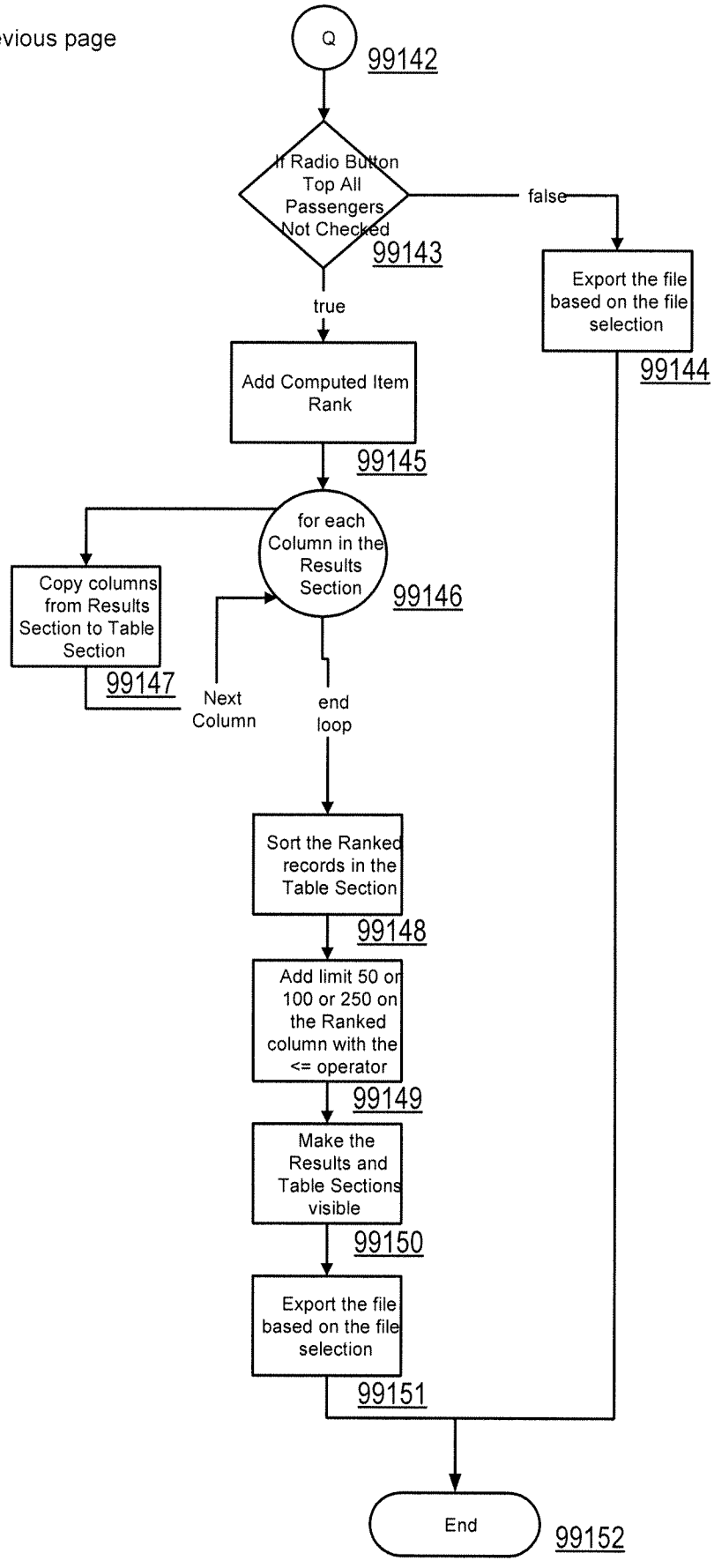

Figure 9Q3

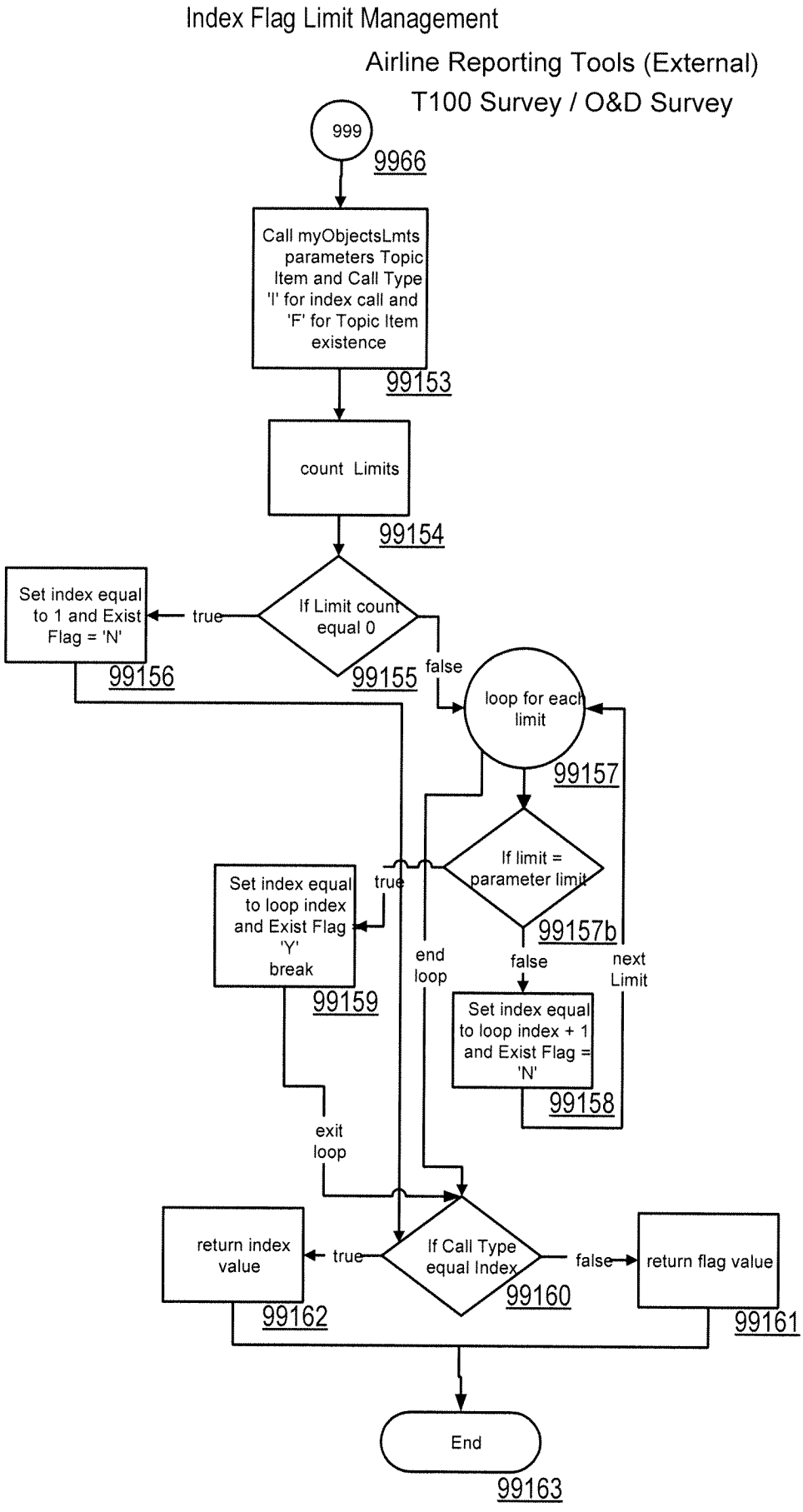
Index Flag Limit Management
Airline Reporting Tools (External)
T100 Survey / O&D Survey
999
9966
Call myObjectsLmts parameters Topic Item and Call Type 'I' for index call and 'F' for Topic Item existence
99153
count Limits
99154
If Limit count equal 0
99155
true
Set index equal to 1 and Exist Flag = 'N'
99156
false
loop for each limit
99157
If limit = parameter limit
99157b
true
Set index equal to loop index and Exist Flag 'Y' break
99159
false
Set index equal to loop index + 1 and Exist Flag = 'N'
99158
end loop
next Limit
exit loop
If Call Type equal Index
99160
true
return index value
99162
false
return flag value
99161
End
99163

Figure 9J

Date Range Limit Management
Airline Reporting Tools (External)
T100 Survey / O&D Survey

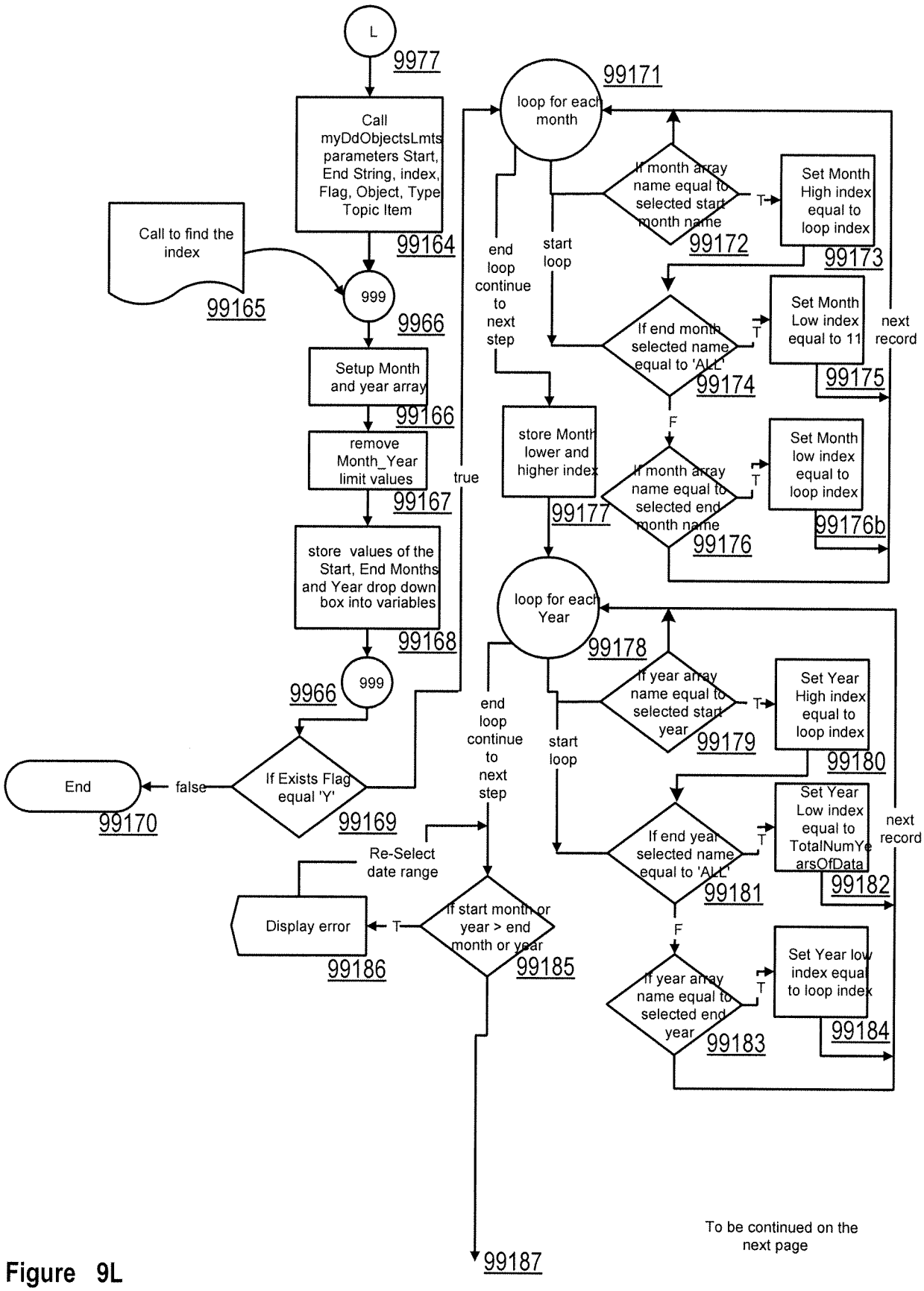

Figure 9L

Date Range Limit Management Continued

Airline Reporting Tools (External)

T100 Survey / O&D Survey

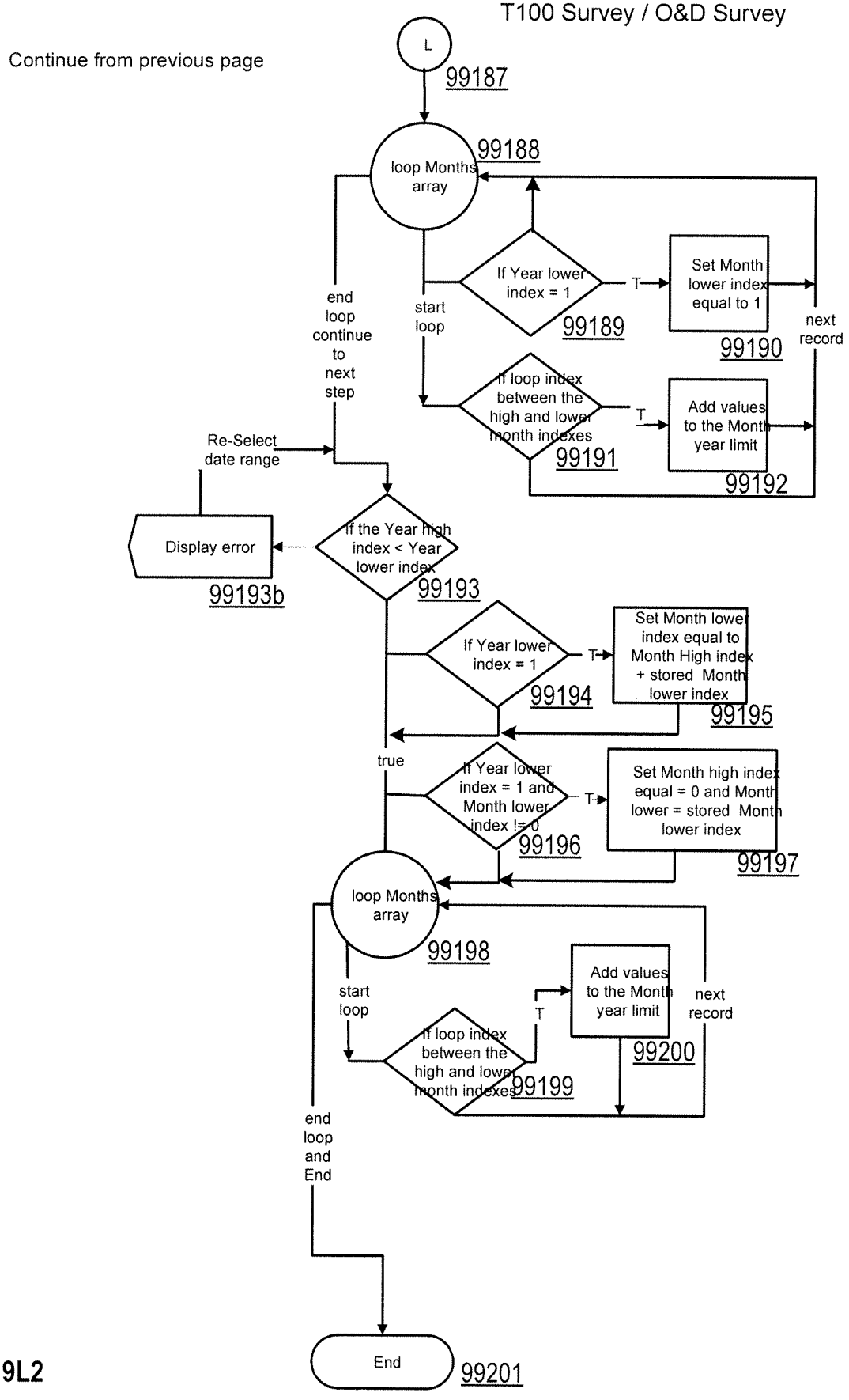

Figure 9L2

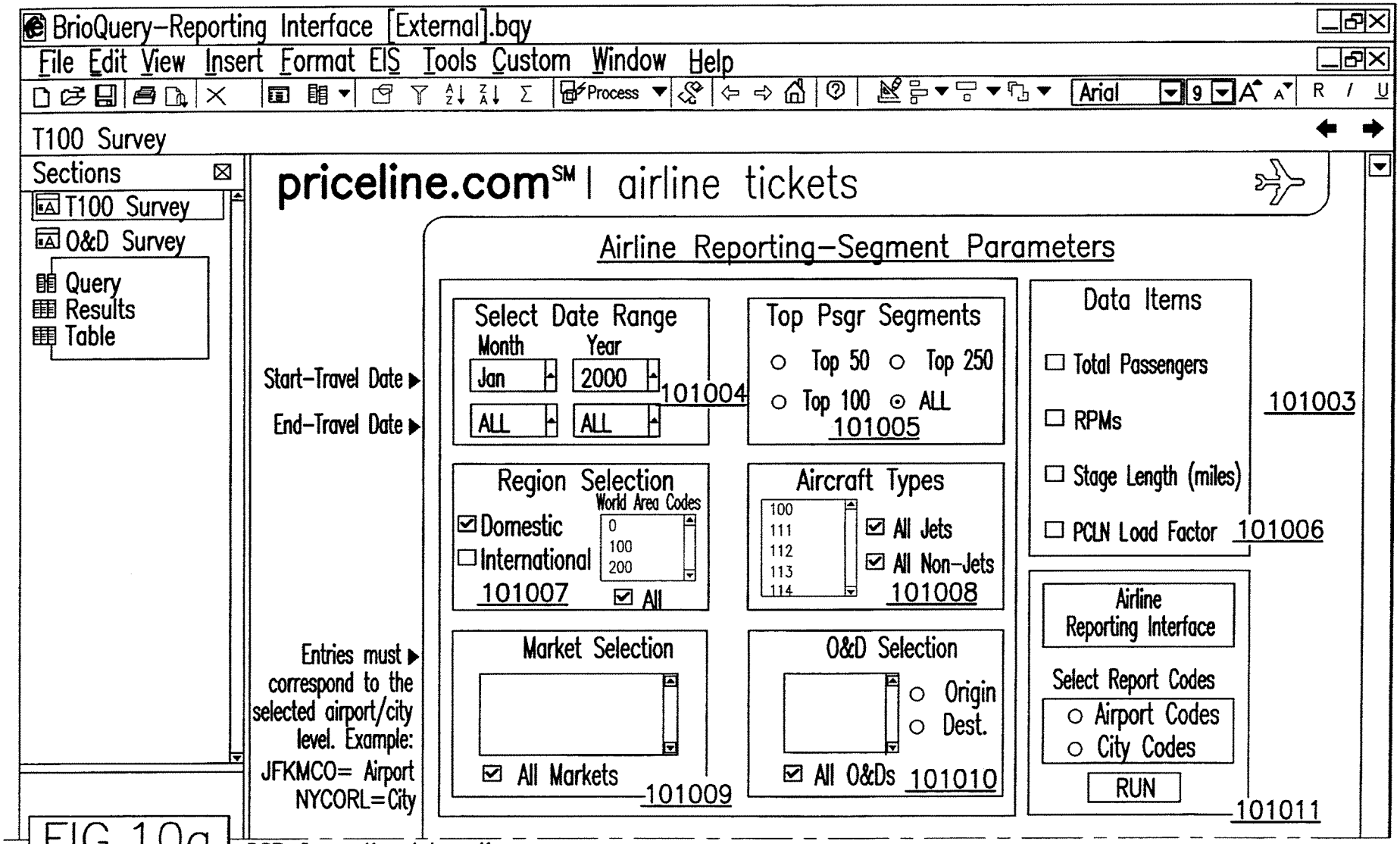

FIG.10a

FIG.10b

FIG.10

FIG.10a

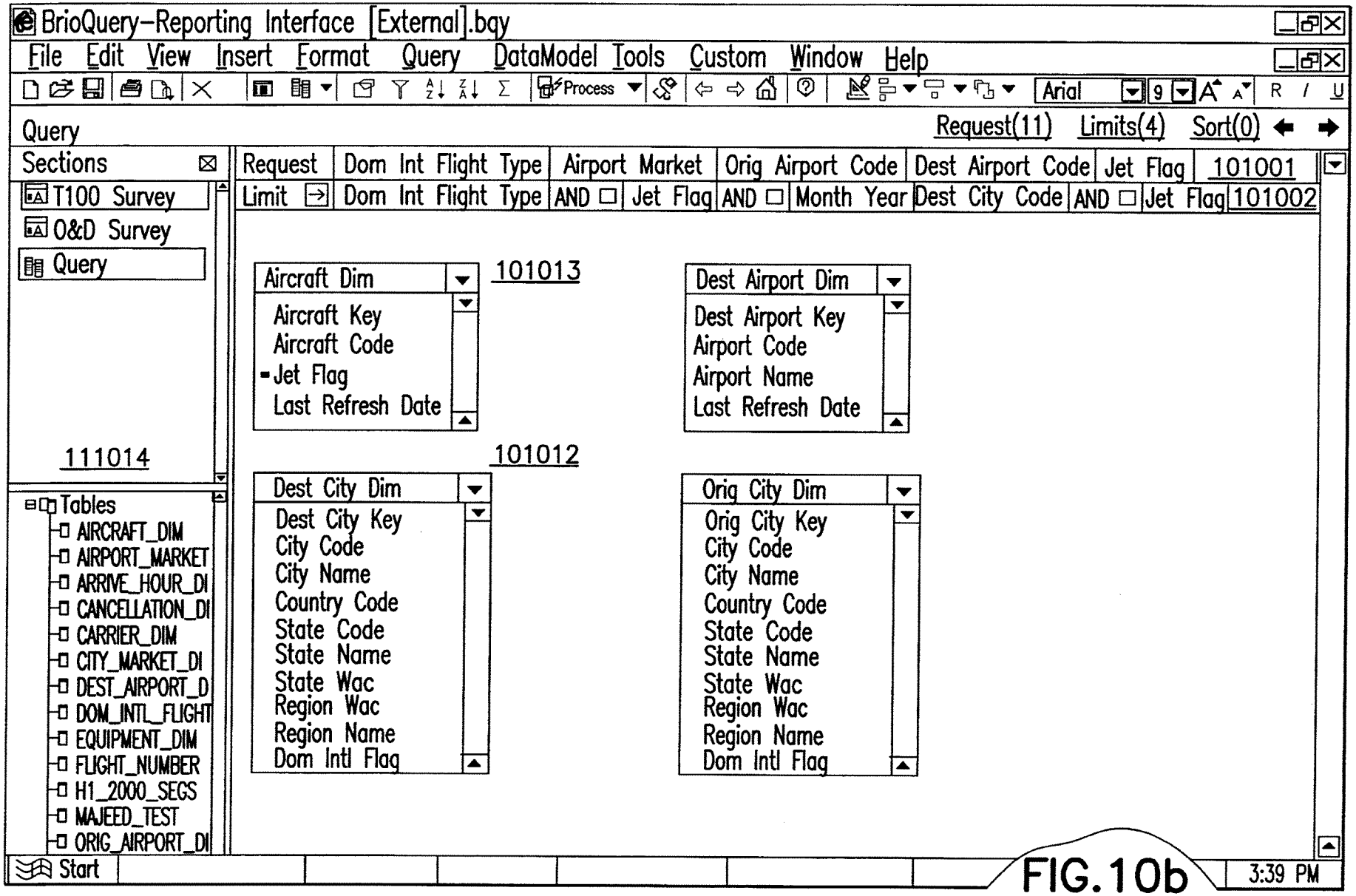
BrioQuery-Reporting Interface [External].bqy
File Edit View Insert Format Query DataModel Tools Custom Window Help
Process
Arial
9
Query
Request(11) Limits(4) Sort(0)
Sections
T100 Survey
O&D Survey
Query
111014
Tables
AIRCRAFT_DIM
AIRPORT_MARKET
ARRIVE_HOUR_DI
CANCELLATION_DI
CARRIER_DIM
CITY_MARKET_DI
DEST_AIRPORT_D
DOM_INTL_FLIGHT
EQUIPMENT_DIM
FLIGHT_NUMBER
H1_2000_SEGS
MAJEED_TEST
ORIG_AIRPORT_DI
Request
Dom Int Flight Type
Airport Market
Orig Airport Code
Dest Airport Code
Jet Flag
101001
Limit
Dom Int Flight Type
AND
Jet Flag
AND
Month Year
Dest City Code
AND
Jet Flag
101002
Aircraft Dim
101013
Aircraft Key
Aircraft Code
Jet Flag
Last Refresh Date
Dest Airport Dim
Dest Airport Key
Airport Code
Airport Name
Last Refresh Date
101012
Dest City Dim
Dest City Key
City Code
City Name
Country Code
State Code
State Name
State Wac
Region Wac
Region Name
Dom Intl Flag
Orig City Dim
Orig City Key
City Code
City Name
Country Code
State Code
State Name
State Wac
Region Wac
Region Name
Dom Intl Flag
Start
3:39 PM

FIG.10b

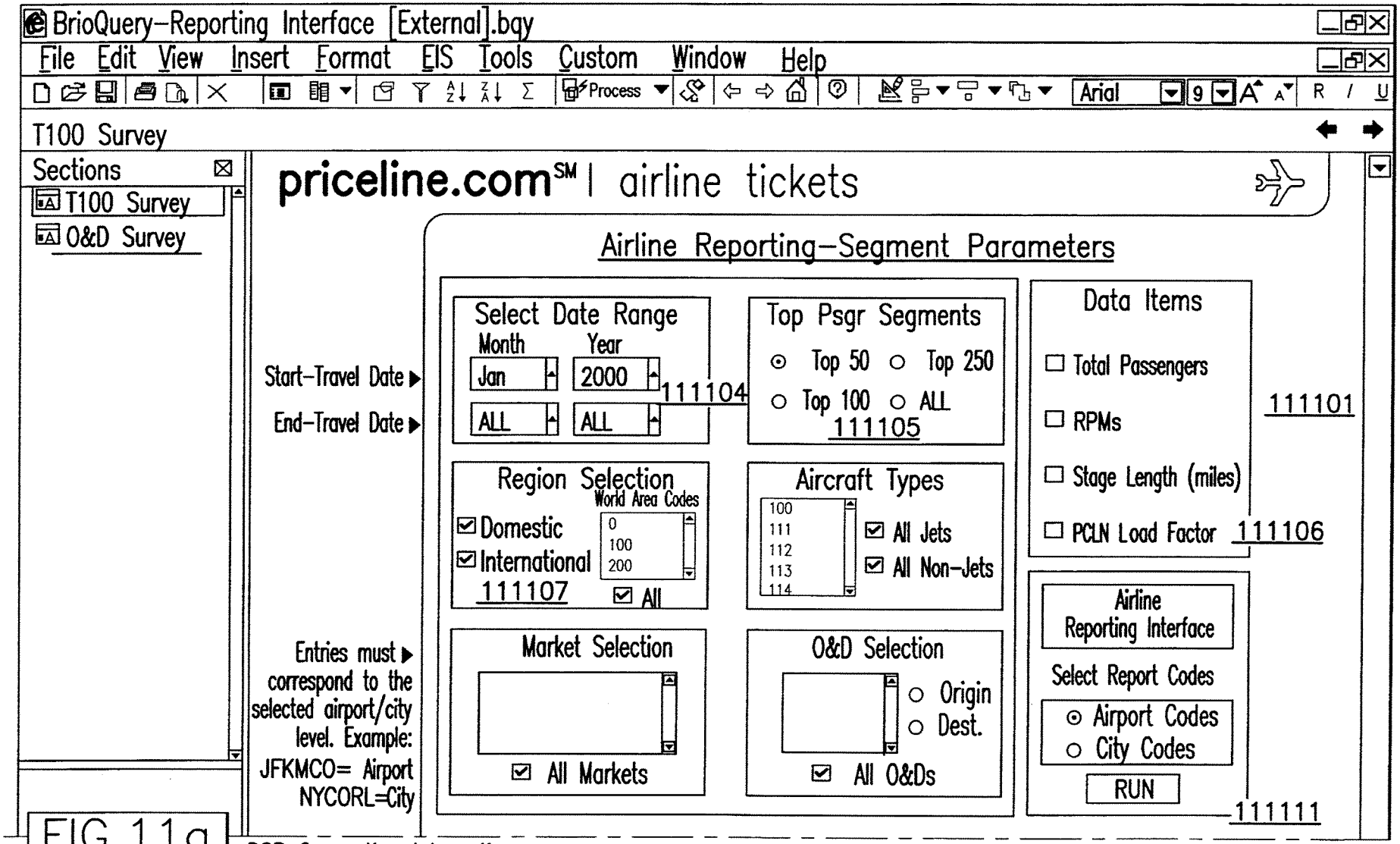

FIG.11a

FIG.11b

FIG.11

FIG.11a

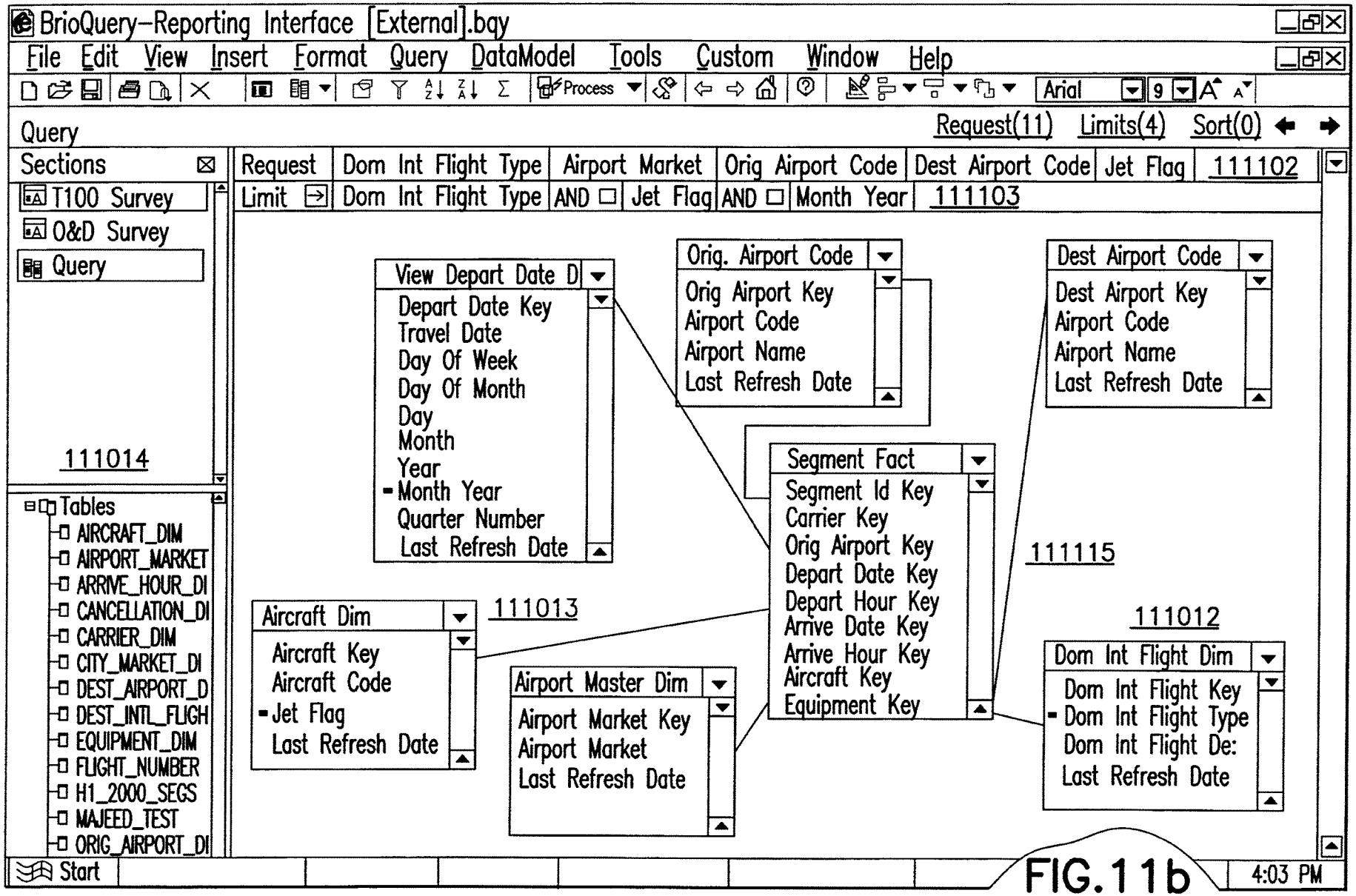
BrioQuery–Reporting Interface [External].bqy
File Edit View Insert Format Query DataModel Tools Custom Window Help
Process
Arial
9
Query
Request(11) Limits(4) Sort(0)
Sections
T100 Survey
O&D Survey
Query
111014
Tables
AIRCRAFT_DIM
AIRPORT_MARKET
ARRIVE_HOUR_DI
CANCELLATION_DI
CARRIER_DIM
CITY_MARKET_DI
DEST_AIRPORT_D
DEST_INTL_FLIGH
EQUIPMENT_DIM
FLIGHT_NUMBER
H1_2000_SEGS
MAJEED_TEST
ORIG_AIRPORT_DI
Request
Dom Int Flight Type
Airport Market
Orig Airport Code
Dest Airport Code
Jet Flag
111102
Limit
Dom Int Flight Type
AND
Jet Flag
AND
Month Year
111103
View Depart Date D
Depart Date Key
Travel Date
Day Of Week
Day Of Month
Day
Month
Year
Month Year
Quarter Number
Last Refresh Date
Orig. Airport Code
Orig Airport Key
Airport Code
Airport Name
Last Refresh Date
Dest Airport Code
Dest Airport Key
Airport Code
Airport Name
Last Refresh Date
Segment Fact
Segment Id Key
Carrier Key
Orig Airport Key
Depart Date Key
Depart Hour Key
Arrive Date Key
Arrive Hour Key
Aircraft Key
Equipment Key
111115
Aircraft Dim
Aircraft Key
Aircraft Code
Jet Flag
Last Refresh Date
111013
Airport Master Dim
Airport Market Key
Airport Market
Last Refresh Date
111012
Dom Int Flight Dim
Dom Int Flight Key
Dom Int Flight Type
Dom Int Flight De:
Last Refresh Date
Start
4:03 PM

FIG.11b

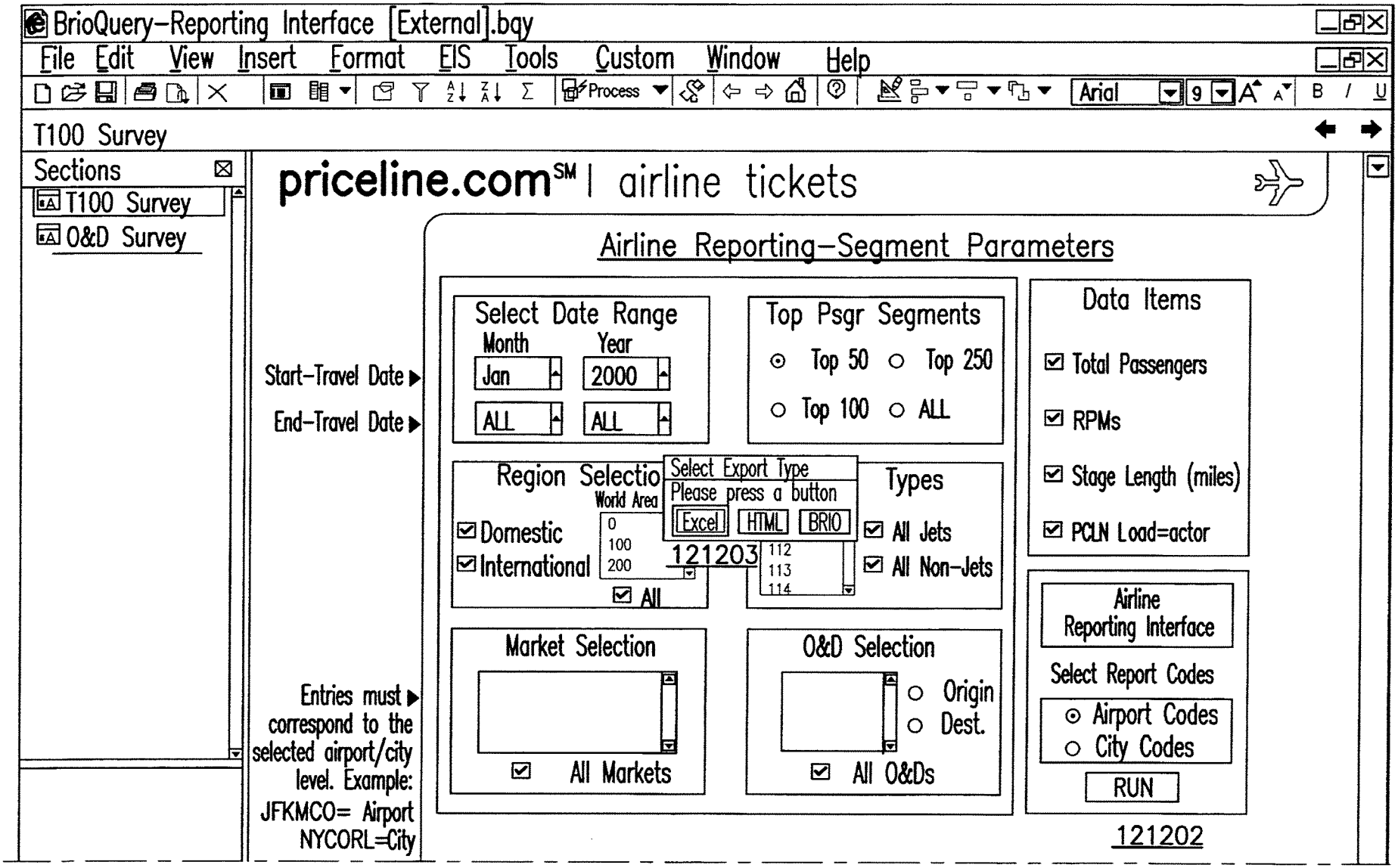
BrioQuery-Reporting Interface [External].bqy
File Edit View Insert Format EIS Tools Custom Window Help
Process
Arial
9
B I U
T100 Survey
Sections
T100 Survey
O&D Survey
priceline.com℠ | airline tickets
Airline Reporting-Segment Parameters
Select Date Range
Month
Year
Start-Travel Date
End-Travel Date
Jan
2000
ALL
ALL
Top Psgr Segments
Top 50
Top 250
Top 100
ALL
Data Items
Total Passengers
RPMs
Stage Length (miles)
PCLN Load=actor
Region Selectio
World Area
Domestic
International
0
100
200
All
Select Export Type
Please press a button
Excel
HTML
BRIO
121203
112
113
114
Types
All Jets
All Non-Jets
Market Selection
All Markets
O&D Selection
Origin
Dest.
All O&Ds
Airline Reporting Interface
Select Report Codes
Airport Codes
City Codes
RUN
Entries must correspond to the selected airport/city level. Example:
JFKMCO= Airport
NYCORL=City
121202

FIG.12a

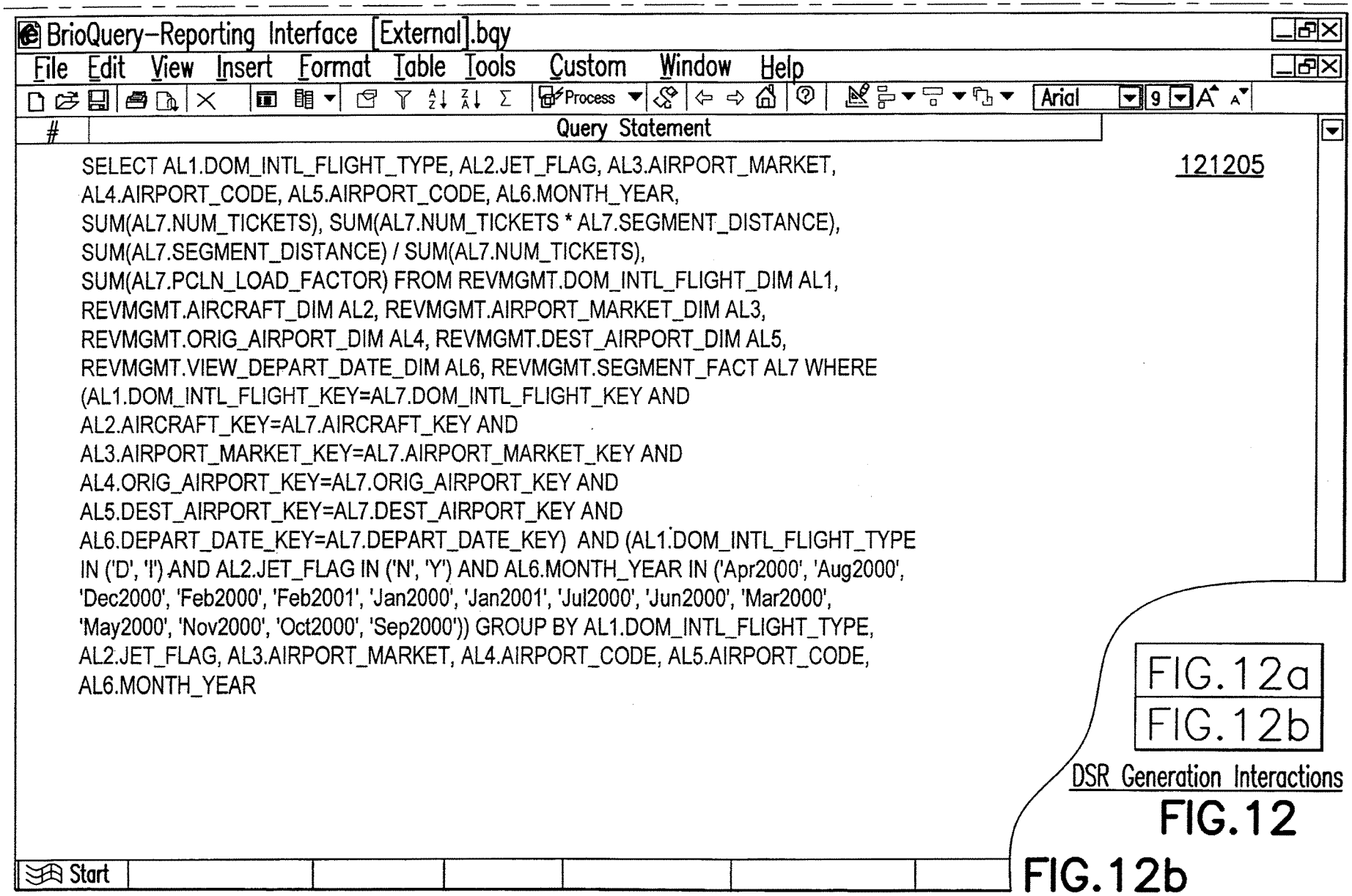

FIG.12a

FIG.12b

DSR Generation Interactions

FIG.12

FIG.12b

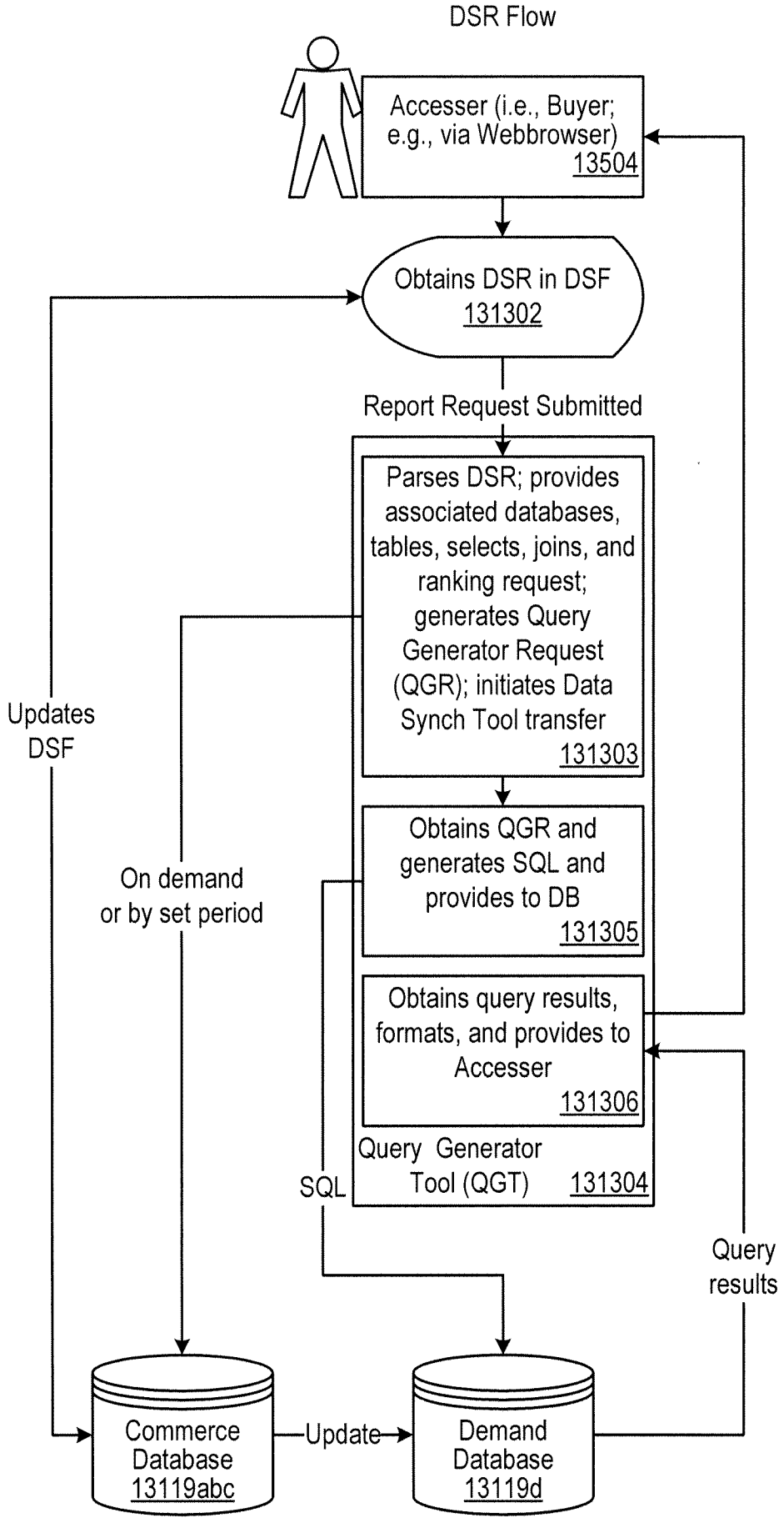
DSR Flow
Accesser (i.e., Buyer; e.g., via Webbrowser) 13504
Obtains DSR in DSF 131302
Report Request Submitted
Parses DSR; provides associated databases, tables, selects, joins, and ranking request; generates Query Generator Request (QGR); initiates Data Synch Tool transfer 131303
Obtains QGR and generates SQL and provides to DB 131305
Obtains query results, formats, and provides to Accesser 131306
Query Generator Tool (QGT) 131304
Updates DSF
On demand or by set period
SQL
Query results
Commerce Database 13119abc
Update
Demand Database 13119d

Figure 13

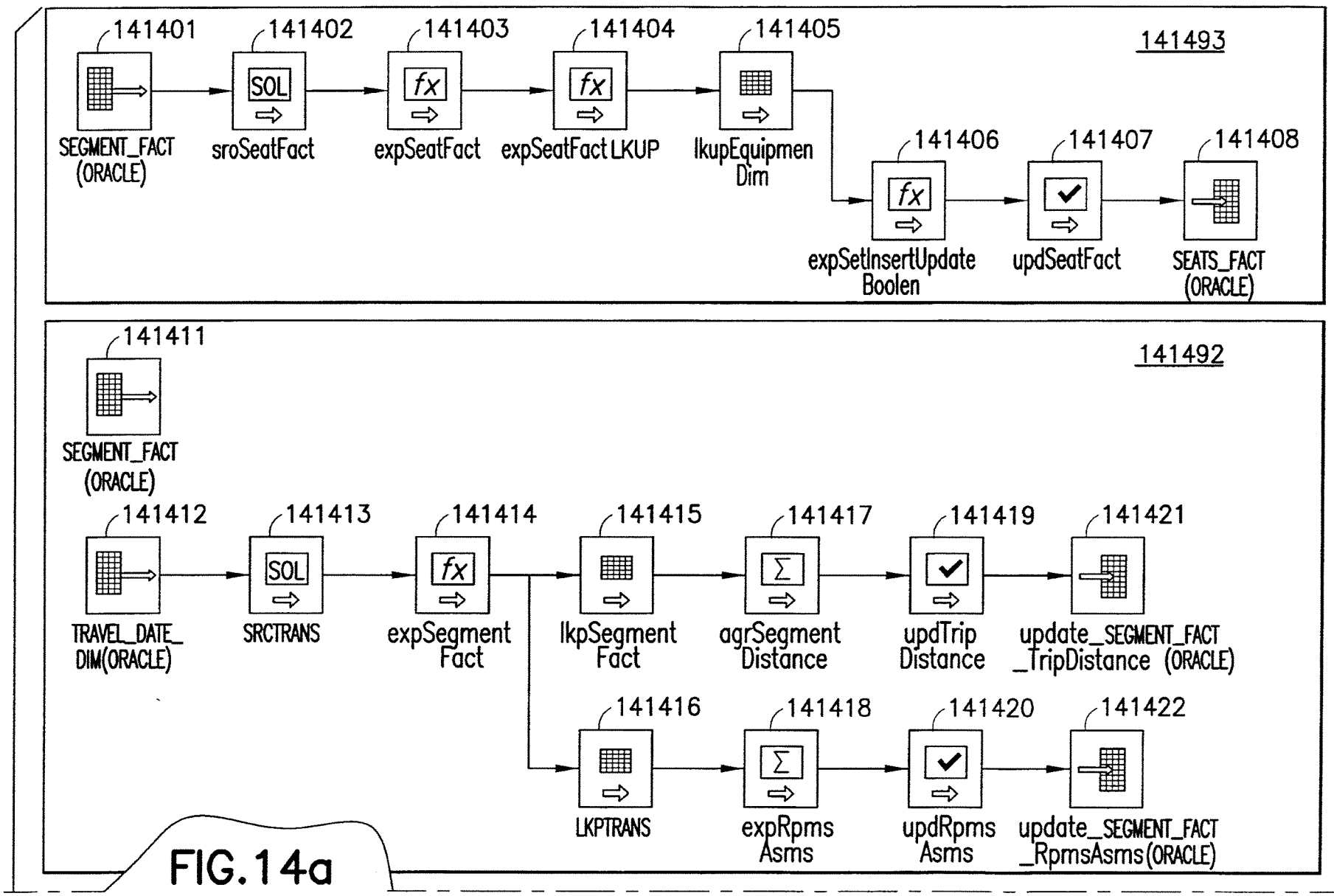
141401
141402
141403
141404
141405
141493
SEGMENT_FACT (ORACLE)
sroSeatFact
expSeatFact
expSeatFact LKUP
lkupEquipmen Dim
141406
141407
141408
expSetInsertUpdate Boolen
updSeatFact
SEATS_FACT (ORACLE)
141411
141492
SEGMENT_FACT (ORACLE)
141412
141413
141414
141415
141417
141419
141421
TRAVEL_DATE_ DIM(ORACLE)
SRCTRANS
expSegment Fact
lkpSegment Fact
agrSegment Distance
updTrip Distance
update_SEGMENT_FACT _TripDistance (ORACLE)
141416
141418
141420
141422
LKPTRANS
expRpms Asms
updRpms Asms
update_SEGMENT_FACT _RpmsAsms (ORACLE)

FIG.14a

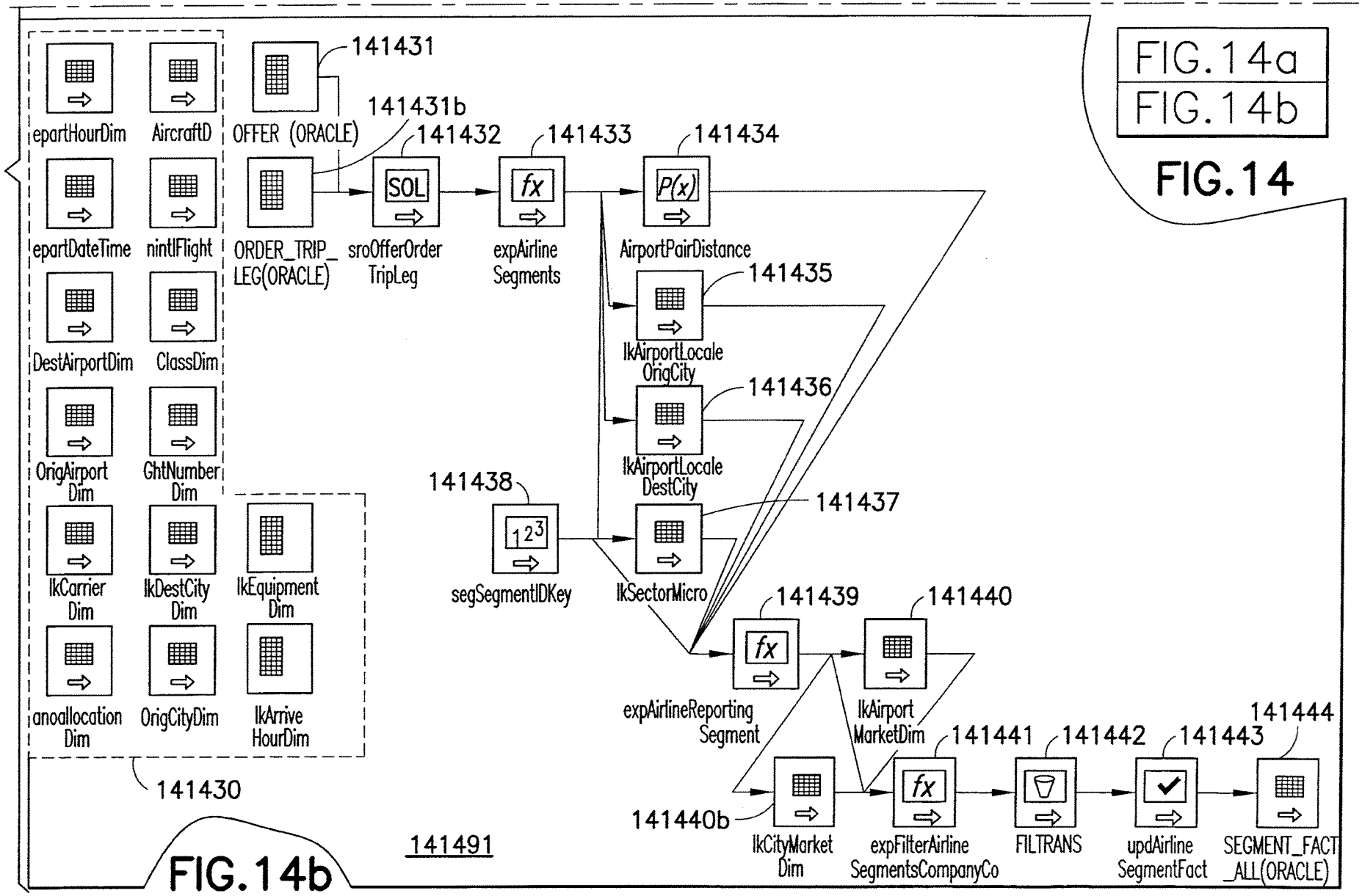
FIG.14a
FIG.14b
FIG.14
epartHourDim
AircraftD
epartDateTime
nintlFlight
DestAirportDim
ClassDim
OrigAirport Dim
GhtNumber Dim
IkCarrier Dim
IkDestCity Dim
IkEquipment Dim
anoallocation Dim
OrigCityDim
IkArrive HourDim
141430
141431
OFFER (ORACLE)
141431b
ORDER_TRIP_ LEG(ORACLE)
141432
SQL
sroOfferOrder TripLeg
141433
fx
expAirline Segments
141434
P(x)
AirportPairDistance
141435
IkAirportLocale OrigCity
141436
IkAirportLocale DestCity
141437
IkSectorMicro
141438
123
segSegmentIDKey
141439
fx
expAirlineReporting Segment
141440
IkAirport MarketDim
141440b
IkCityMarket Dim
141441
fx
expFilterAirline SegmentsCompanyCo
141442
FILTRANS
141443
updAirline SegmentFact
141444
SEGMENT_FACT _ALL(ORACLE)
141491
FIG.14b

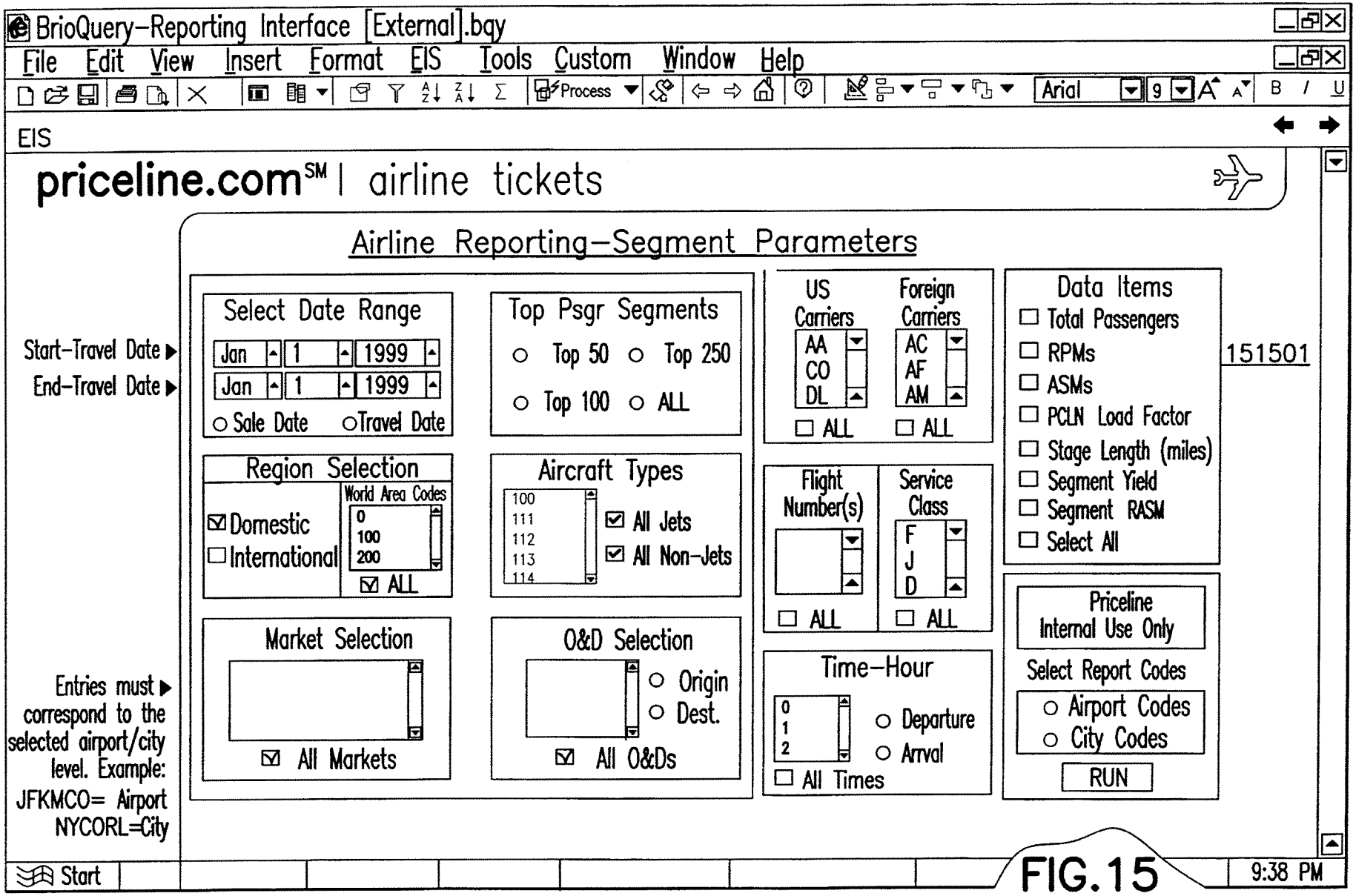
BrioQuery-Reporting Interface [External].bqy
File Edit View Insert Format EIS Tools Custom Window Help
Process
Arial
9
B I U
EIS
priceline.com℠ | airline tickets
Airline Reporting-Segment Parameters
Start-Travel Date ▶
End-Travel Date ▶
Select Date Range
Jan 1 1999
Jan 1 1999
Sale Date
Travel Date
Top Psgr Segments
Top 50
Top 250
Top 100
ALL
US Carriers
AA
CO
DL
ALL
Foreign Carriers
AC
AF
AM
ALL
Data Items
Total Passengers
RPMs
ASMs
PCLN Load Factor
Stage Length (miles)
Segment Yield
Segment RASM
Select All
151501
Region Selection
Domestic
International
World Area Codes
0
100
200
ALL
Aircraft Types
100
111
112
113
114
All Jets
All Non-Jets
Flight Number(s)
ALL
Service Class
F
J
D
ALL
Priceline Internal Use Only
Select Report Codes
Airport Codes
City Codes
RUN
Market Selection
All Markets
O&D Selection
Origin
Dest.
All O&Ds
Time-Hour
0
1
2
Departure
Arrival
All Times
Entries must correspond to the selected airport/city level. Example: JFKMCO= Airport NYCORL=City
Start
9:38 PM

FIG. 15

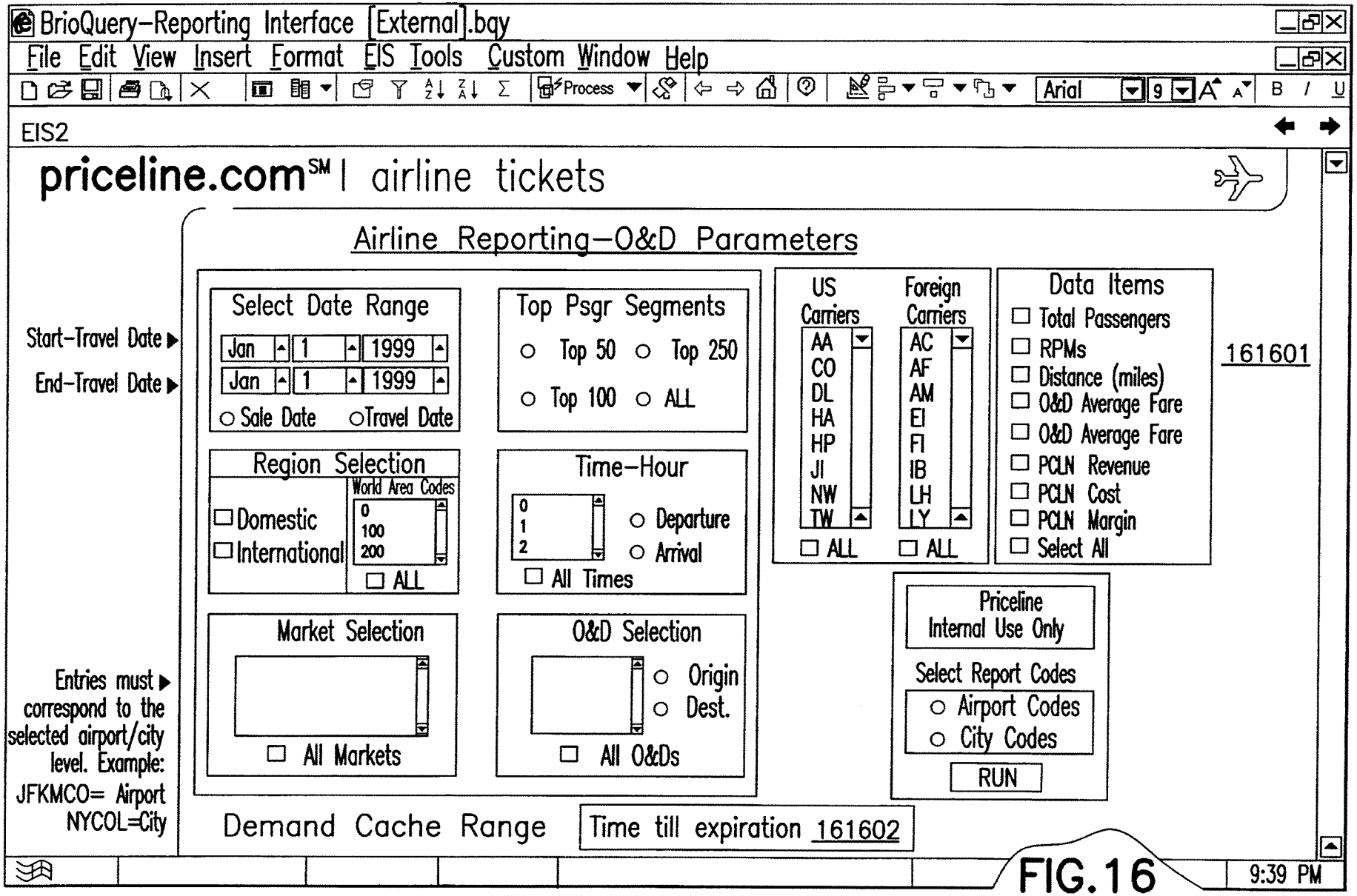
BrioQuery–Reporting Interface [External].bqy
File Edit View Insert Format EIS Tools Custom Window Help
Process
Arial
9
B I U
EIS2
priceline.com℠ | airline tickets
Airline Reporting–O&D Parameters
Start–Travel Date
End–Travel Date
Select Date Range
Jan 1 1999
Jan 1 1999
Sale Date
Travel Date
Top Psgr Segments
Top 50
Top 250
Top 100
ALL
US Carriers
AA
CO
DL
HA
HP
JI
NW
TW
ALL
Foreign Carriers
AC
AF
AM
EI
FI
IB
LH
LY
ALL
Data Items
Total Passengers
RPMs
Distance (miles)
O&D Average Fare
O&D Average Fare
PCLN Revenue
PCLN Cost
PCLN Margin
Select All
161601
Region Selection
Domestic
International
World Area Codes
0
100
200
ALL
Time–Hour
0
1
2
Departure
Arrival
All Times
Market Selection
All Markets
O&D Selection
Origin
Dest.
All O&Ds
Priceline Internal Use Only
Select Report Codes
Airport Codes
City Codes
RUN
Entries must correspond to the selected airport/city level. Example:
JFKMCO= Airport
NYCOL=City
Demand Cache Range
Time till expiration 161602
9:39 PM

FIG.16

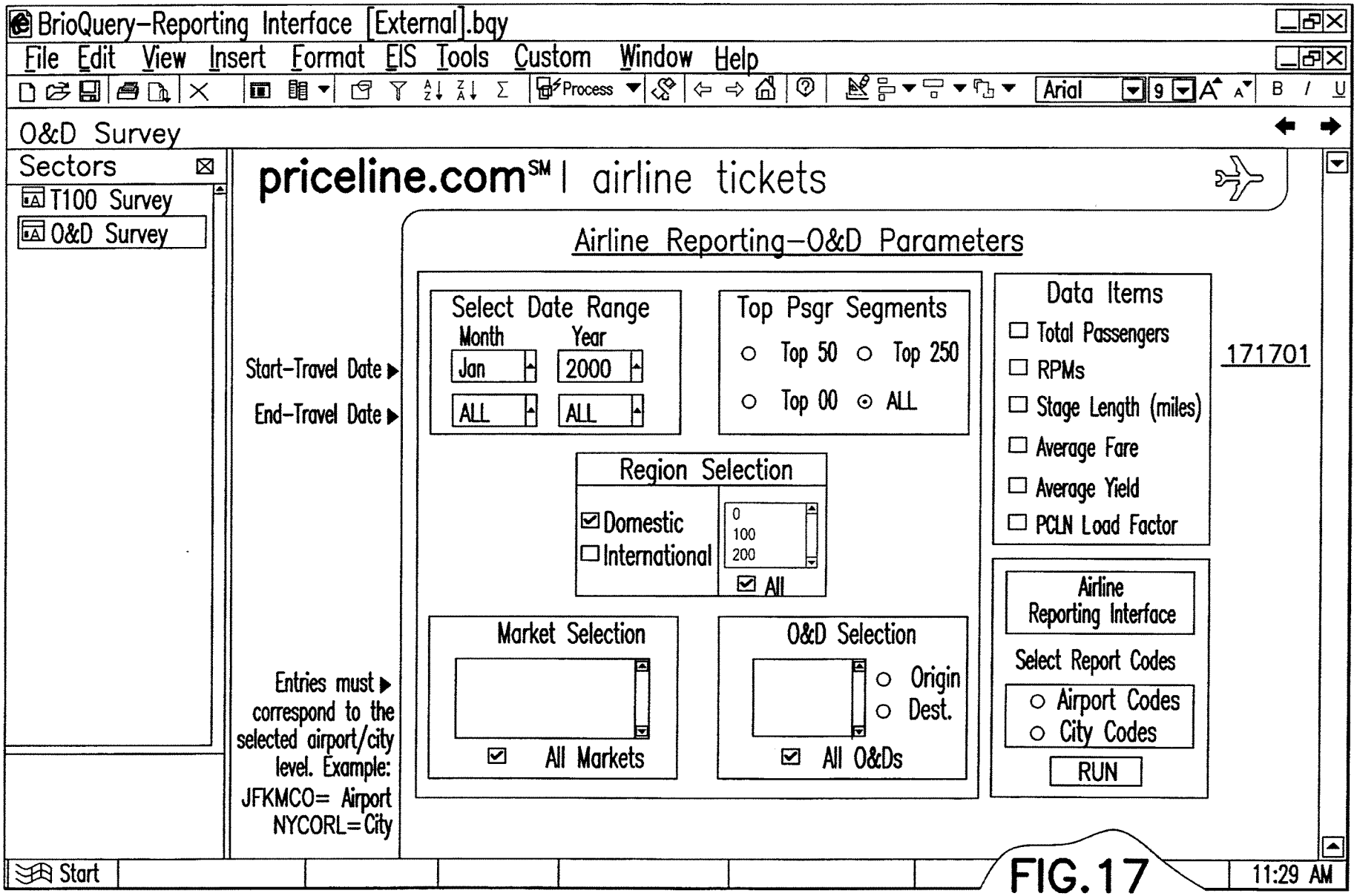
BrioQuery-Reporting Interface [External].bqy
File Edit View Insert Format EIS Tools Custom Window Help
Process
Arial
9
B I U
O&D Survey
Sectors
T100 Survey
O&D Survey
priceline.com℠ | airline tickets
Airline Reporting-O&D Parameters
Start-Travel Date
End-Travel Date
Select Date Range
Month
Year
Jan
2000
ALL
ALL
Top Psgr Segments
Top 50
Top 250
Top 00
ALL
Data Items
Total Passengers
RPMs
Stage Length (miles)
Average Fare
Average Yield
PCLN Load Factor
171701
Region Selection
Domestic
International
0
100
200
All
Airline Reporting Interface
Select Report Codes
Airport Codes
City Codes
RUN
Market Selection
All Markets
O&D Selection
Origin
Dest.
All O&Ds
Entries must correspond to the selected airport/city level. Example:
JFKMCO= Airport
NYCORL=City
Start
11:29 AM

FIG. 17

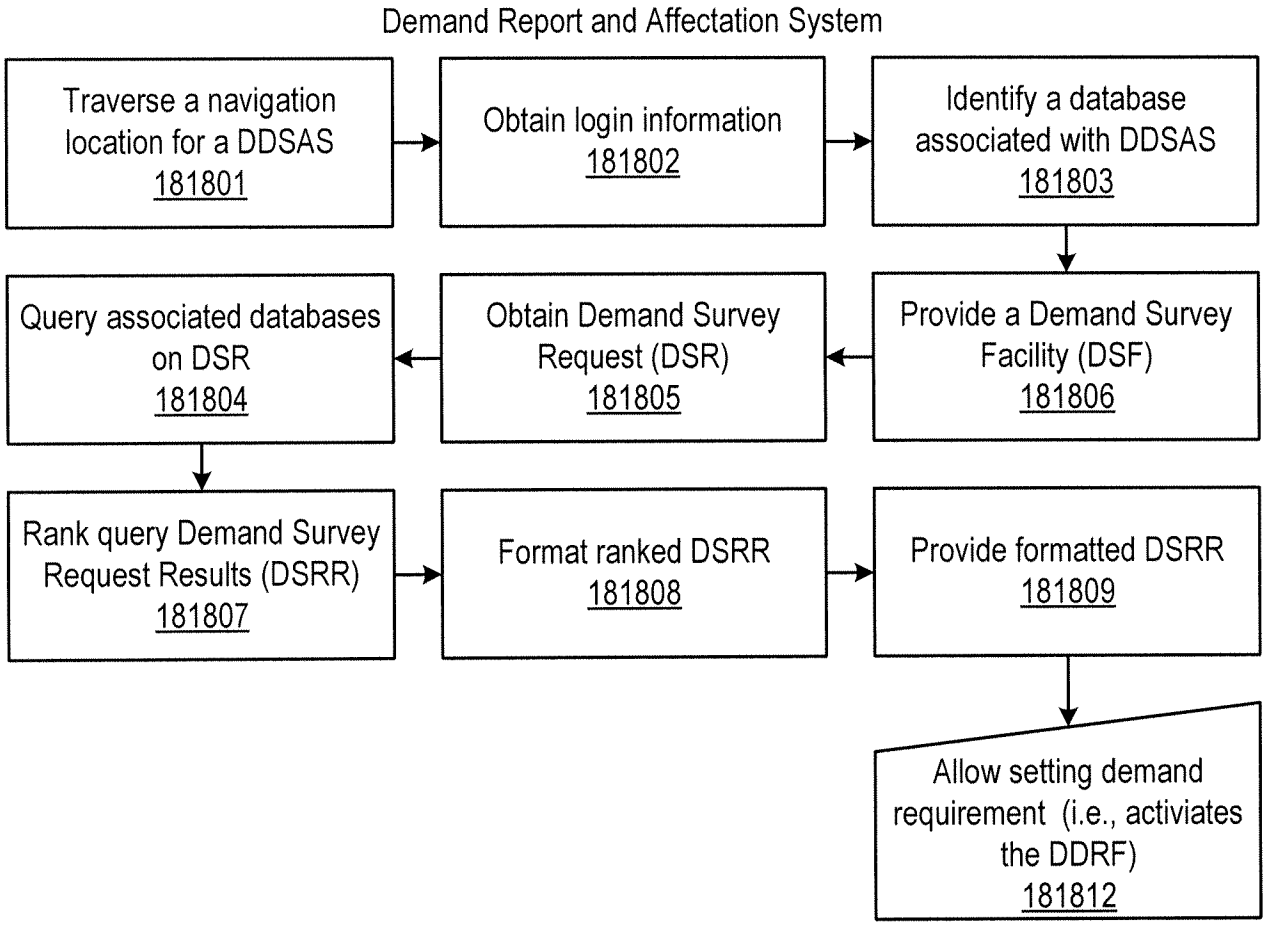
Demand Report and Affectation System
Traverse a navigation location for a DDSAS 181801
Obtain login information 181802
Identify a database associated with DDSAS 181803
Provide a Demand Survey Facility (DSF) 181806
Obtain Demand Survey Request (DSR) 181805
Query associated databases on DSR 181804
Rank query Demand Survey Request Results (DSRR) 181807
Format ranked DSRR 181808
Provide formatted DSRR 181809
Allow setting demand requirement (i.e., activiates the DDRF) 181812

Figure 18

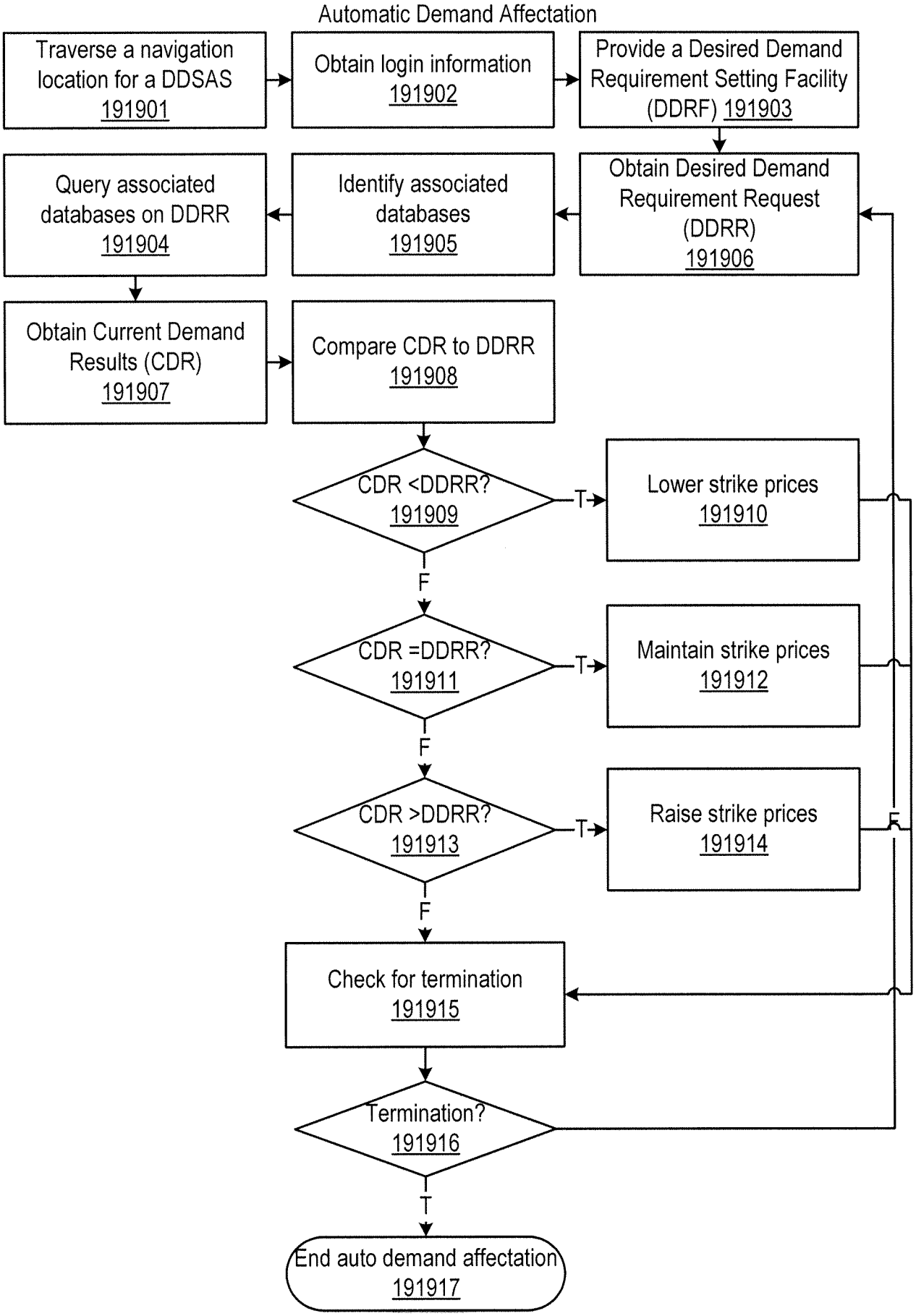
Automatic Demand Affectation
Traverse a navigation location for a DDSAS 191901
Obtain login information 191902
Provide a Desired Demand Requirement Setting Facility (DDRF) 191903
Obtain Desired Demand Requirement Request (DDRR) 191906
Identify associated databases 191905
Query associated databases on DDRR 191904
Obtain Current Demand Results (CDR) 191907
Compare CDR to DDRR 191908
CDR <DDRR? 191909
T
Lower strike prices 191910
F
CDR =DDRR? 191911
T
Maintain strike prices 191912
F
CDR >DDRR? 191913
T
Raise strike prices 191914
F
Check for termination 191915
Termination? 191916
T
End auto demand affectation 191917

Figure 19

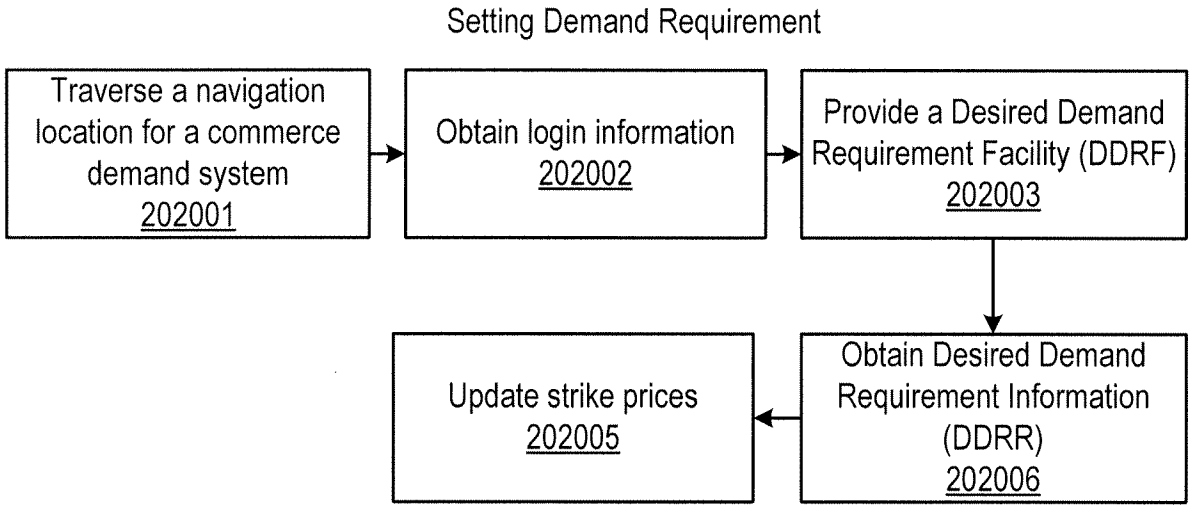
Setting Demand Requirement
Traverse a navigation location for a commerce demand system
202001
Obtain login information
202002
Provide a Desired Demand Requirement Facility (DDRF)
202003
Obtain Desired Demand Requirement Information (DDRR)
202006
Update strike prices
202005

Figure 20

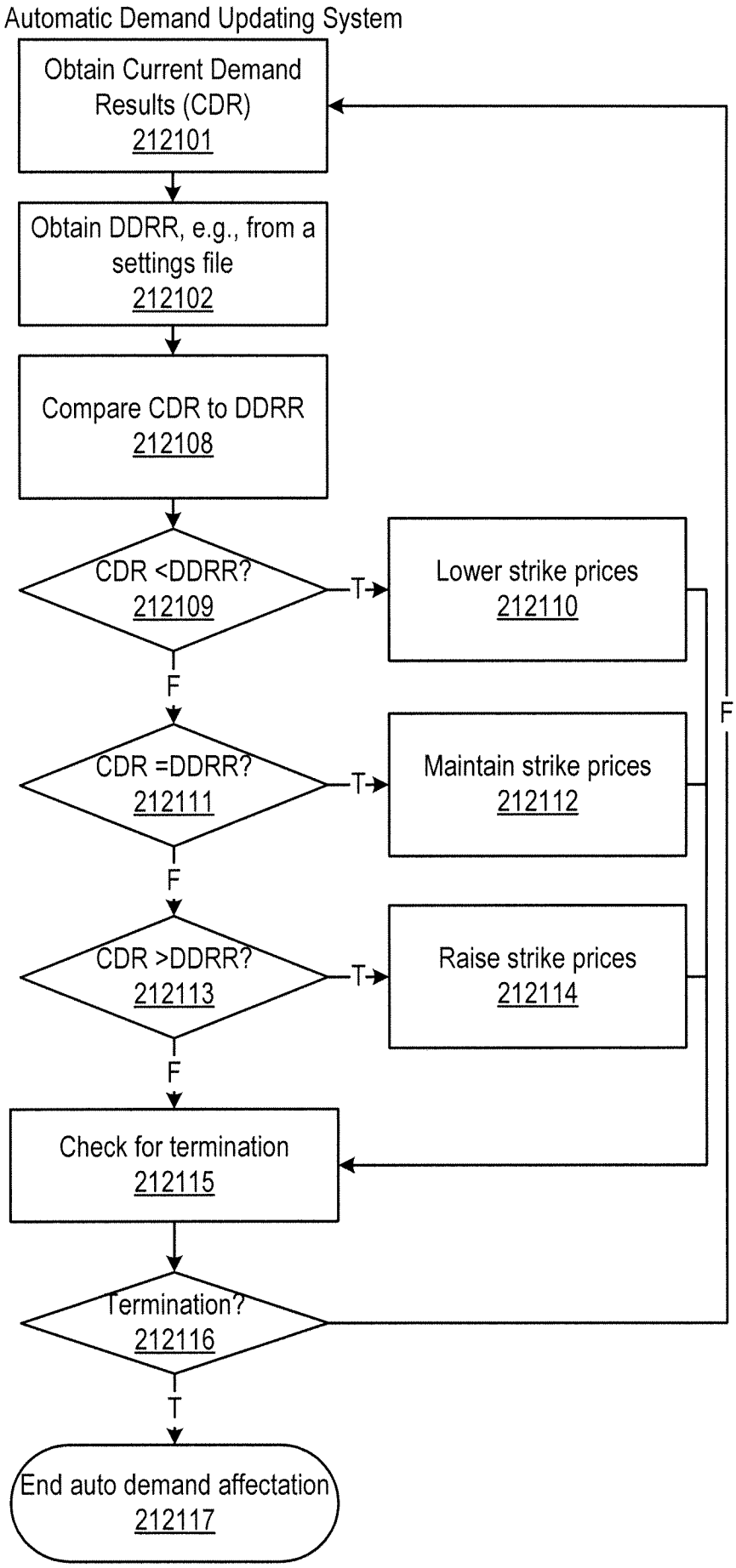
Automatic Demand Updating System
Obtain Current Demand Results (CDR) 212101
Obtain DDRR, e.g., from a settings file 212102
Compare CDR to DDRR 212108
CDR <DDRR? 212109
T
Lower strike prices 212110
F
CDR =DDRR? 212111
T
Maintain strike prices 212112
F
CDR >DDRR? 212113
T
Raise strike prices 212114
F
Check for termination 212115
Termination? 212116
T
End auto demand affectation 212117
F

Figure 21

Demand Survey Report in HTML

Dom Intl Flight Type	Jet Flag	Airport Market	Orig Airport Code	Dest Airport Code	Month Year	PAX	RPMs	
D	N	PITCLE	PIT	CLE	Feb2000	272	28,914.8784	
D	N	CLEPIT	CLE	PIT	Feb2000	266	28,277.0502	
D	N	BUFCLE	BUF	CLE	Feb2000	232	44,337.7752	1
D	N	EWRBWI	EWR	BWI	Feb2000	231	39,051.7743	1
D	N	CLEDTW	CLE	DTW	Feb2000	225	21,394.17	
D	N	DFWOKC	DFW	OKC	Feb2000	218	38,355.2906	1
D	N	PFNATL	PFN	ATL	Feb2000	217	53,698.2775	1
D	N	OKCDFW	OKC	DFW	Feb2000	214	37,651.5238	1
D	N	BWIEWR	BWI	EWR	Feb2000	213	36,008.7789	
D	N	DTWCLE	DTW	CLE	Feb2000	205	19,492.466	
D	N	CLECMH	CLE	CMH	Feb2000	193	21,806.0471	
D	N	SFOSMF	SFO	SMF	Feb2000	191	16,379.1286	
D	N	SMFSFO	SMF	SFO	Feb2000	187	16,036.1102	
D	N	ATLPFN	ATL	PFN	Feb2000	185	45,779.6375	1
D	N	TULDFW	TUL	DFW	Feb2000	182	43,220.177	1
D	N	CMHCLE	CMH	CLE	Feb2000	182	20,563.2154	
D	N	IAHDFW	IAH	DFW	Feb2000	170	38,227.747	1
D	N	DFWTUL	DFW	TUL	Feb2000	156	37,045.866	1
D	N	ILMATL	ILM	ATL	Feb2000	151	56,981.1637	3
D	N	ROAATL	ROA	ATL	Feb2000	150	53,599.065	2
D	N	MIARSW	MIA	RSW	Feb2000	146	16,810.075	
D	N	ICTDFW	ICT	DFW	Feb2000	143	47,094.9336	2
D	N	DFWICT	DFW	ICT	Feb2000	141	46,436.2632	2
D	N	ATLGNV	ATL	GNV	Feb2000	138	41,551.8966	2
D	N	BOSJFK	BOS	JFK	Feb2000	134	25,126.1524	1
D	N	DFWIAH	DFW	IAH	Feb2000	133	29,907.5903	1
D	N	SANLAX	SAN	LAX	Feb2000	132	14,474.9088	
D	N	ATLILM	ATL	ILM	Feb2000	130	49,056.631	2
D	N	MIAEYW	MIA	EYW	Feb2000	130	16,493.984	
D	N	ATLCRW	ATL	CRW	Feb2000	125	45,465.7625	2
D	N	DFWHOU	DFW	HOU	Feb2000	125	30,932.025	2
D	N	RSWMIA	RSW	MIA	Feb2000	123	14,161.9125	
D	N	CLEBUF	CLE	BUF	Feb2000	123	23,506.6653	1
D	N	SEAPDX	SEA	PDX	Feb2000	121	15,718.5776	
D	N	CRWATL	CRW	ATL	Feb2000	121	44,010.8581	2
D	N	EYWMIA	EYW	MIA	Feb2000	118	14,971.4624	1
D	N	SLCGJT	SLC	GJT	Feb2000	118	25,512.7682	1
D	N	JFKBOS	JFK	BOS	Feb2000	115	21,563.489	1
D	N	RAPDEN	RAP	DEN	Feb2000	114	34,447.2888	2
D	N	PITJFK	PIT	JFK	Feb2000	114	38,650.959	2
D	N	ATLMYR	ATL	MYR	Feb2000	113	35,780.6138	2
D	N	ATLDHN	ATL	DHN	Feb2000	113	19,308.5134	1
D	N	LAXSAN	LAX	SAN	Feb2000	111	12,172.0824	
D	N	GJTSLC	GJT	SLC	Feb2000	110	23,783.089	1
D	N	DENRAP	DEN	RAP	Feb2000	110	33,238.612	2
D	N	DHNATL	DHN	ATL	Feb2000	108	18,454.1544	1
D	N	HOUDFW	HOU	DFW	Feb2000	108	26,725.2696	1
D	N	BTVEWR	BTV	EWR	Feb2000	106	28,156.9708	2
D	N	MHTEWR	MHT	EWR	Feb2000	104	21,743.0304	1
D	N	PHLEWR	PHL	EWR	Feb2000	103	8,361.54	
D	N	PVDEWR	PVD	EWR	Feb2000	103	16,393.5109	1

Figure 22

DEMAND SURVEY REPORT IN EXCEL

DOM INTL FLIGHT TYPE	JET FLAG	AIRPORT MARKET	ORIG AIRPORT CODE	DEST AIRPORT CODE	MONTH YEAR	PAX	RPMs	MILES	PCLN LOAD FACTOR	TOP MARKET
D	N	PITCLE	PIT	CLE	FEB2000	272	28,914.8784	85.98174	0.05242	1
D	N	CLEPIT	CLE	PIT	FEB2000	266	28,277.0502	85.52333	0.05116	2
D	N	BUFCLE	BUF	CLE	FEB2000	232	44,337.7752	141.68582	0.03432	3
D	N	EWRBWI	EWR	BWI	FEB2000	231	39,051.7743	126,60851	0.03139	4
D	N	CLEDTW	CLE	DTW	FEB2000	225	21,394.17	72.26475	0.03713	5
D	N	DFWOKC	DFW	OKC	FEB2000	218	38,355.2906	140.43053	0.03208	6
D	N	PFNATL	PFN	ATL	FEB2000	217	53,698.2775	185,87821	0.02017	7
D	N	OKCDFW	OKC	DFW	FEB2000	214	37,651.5238	136.47814	0.03323	8
D	N	BWIEWR	BWI	EWR	FEB2000	213	36,008.7789	120.6404	0.03197	9
D	N	DTWCLE	DTW	CLE	FEB2000	205	19,492.466	75.1405	0.0398	10
D	N	CLECMH	CLE	CMH	FEB2000	193	21,806.0471	83.71405	0.03369	11
D	N	SFOSMF	SFO	SMF	FEB2000	191	16,379.1286	61.95882	0.04194	12
D	N	SMFSFO	SMF	SFO	FEB2000	187	16,036.1102	61.44982	0.04229	13
D	N	ATLPFN	ATL	PFN	FEB2000	185	45,779.6375	183,2531	0.02046	14
D	N	TULDFW	TUL	DFW	FEB2000	182	43,220.177	174.84313	0.0357	15
D	N	CMHCLE	CMH	CLE	FEB2000	182	20,563.2154	86.91131	0.0321	15
D	N	IAHDFW	IAH	DFW	FEB2000	170	38,227.747	170.63596	0.03993	17
D	N	DFWTUL	DFW	TUL	FEB2000	156	37,045.866	181.14966	0.03389	18
D	N	ILMATL	ILM	ATL	FEB2000	151	56,981.1637	302.38677	0.03365	19
D	N	ROAATL	ROA	ATL	FEB2000	150	53,599.065	293.00822	0.02674	20
D	N	MIARSW	MIA	RSW	FEB2000	146	16,810.075	83.59298	0.02557	21
D	N	ICTDFW	ICT	DFW	FEB2000	143	43,094.9336	262,54694	0.03791	22
D	N	DFWICT	DFW	ICT	FEB2000	141	46,436.2632	259,26388	0.03841	23
D	N	ATLGNV	ATL	GNV	FEB2000	138	41,551.8966	211,64325	0.02178	24

FIG.23A

D	N	BOSJFK	BOS	JFK	FEB2000	134	25,126.1524	134.33452	0.04274	25
D	N	DFWIAH	DFW	IAH	FEB2000	133	29,907.5903	175.83749	0.03875	26
D	N	SANLAX	SAN	LAX	FEB2000	132	14,474.9088	85.56678	0.03817	27
D	N	ATLILM	ATL	ILM	FEB2000	130	49,056.631	296.08144	0.03177	28
D	N	MIAEYW	MIA	EYW	FEB2000	130	16,493.984	97.59754	0.02715	28
D	N	ATLCRW	ALT	CRW	FEB2000	125	45,465.7625	276.43184	0.03987	30
D	N	DFWHOU	DFW	HOU	FEB2000	125	30,932.025	201.92426	0.03249	30
D	N	RSWMIA	RSW	MIA	FEB2000	123	14,161.9125	87.99126	0.02376	32
D	N	CLEBUF	CLE	BUF	FEB2000	123	23,506.6653	144.49864	0.03381	32
D	N	SEAPDX	SEA	PDX	FEB2000	121	15,718.5776	91.256	0.04314	34
D	N	CRWATL	CRW	ATL	FEB2000	121	44,010.8581	264.52807	0.04167	34
D	N	EYWMIA	EYW	MIA	FEB2000	118	14,971.4624	101.07135	0.02615	36
D	N	SLCGJT	SLC	GJT	FEB2000	118	25,512.7682	163.07357	0.04018	36
D	N	JFKBOS	JFK	BOS	FEB2000	115	21,563.489	145.11535	0.03906	38
D	N	RAPDEN	RAP	DEN	FEB2000	114	34,447.2888	241.20524	0.04041	39
D	N	PITJFK	PIT	JFK	FEB2000	114	38,650.959	288.48438	0.03582	39
D	N	ATLMYR	ATL	MYR	FEB2000	113	35,780.6138	212.96316	0.02253	41
D	N	ALTDHN	ATL	DHN	FEB2000	113	19,308.5134	143.65328	0.02952	41
D	N	LAXSAN	LAX	SAN	FEB2000	111	12,172.0824	87.9243	0.03714	43
D	N	GJTSLC	GJT	SLC	FEB2000	110	23,783.089	169.03683	0.03876	44
D	N	DENRAP	DEN	RAP	FEB2000	110	33,238.612	241.73536	0.04032	44
D	N	DHNATL	DHN	ATL	FEB2000	108	18,454.1544	142.39317	0.0303	46
D	N	HOUDFW	HOU	DFW	FEB2000	108	26,725.2696	199.33972	0.03227	46
D	N	BTVEWR	BTV	EWR	FEB2000	106	28,156.9708	213.00663	0.02643	48

FIG.23A
FIG.23B

FIG.23

FIG.23B

Demand Survey Report in Brio

Dom Intl Fl	Jet Flag	Airport Mar	Orig Airpor	Dest Airpor	Month Yea	PAX	RPMs	Miles	Pcln Load I	TopMarket
D	N	PITCLE	PIT	CLE	Feb-00	272	28,914.88	85.98174	0.05242	1
D	N	CLEPIT	CLE	PIT	Feb-00	266	28,277.05	85.52333	0.05116	2
D	N	BUFCLE	BUF	CLE	Feb-00	232	44,337.78	141.6858	0.03432	3
D	N	EWRBWI	EWR	BWI	Feb-00	231	39,051.77	126.6085	0.03139	4
D	N	CLEDTW	CLE	DTW	Feb-00	225	21,394.17	72.26475	0.03713	5
D	N	DFWOKC	DFW	OKC	Feb-00	218	38,355.29	140.4305	0.03208	6
D	N	PFNATL	PFN	ATL	Feb-00	217	53,698.28	185.8782	0.02017	7
D	N	OKCDFW	OKC	DFW	Feb-00	214	37,651.52	136.4781	0.03323	8
D	N	BWIEWR	BWI	EWR	Feb-00	213	36,008.78	120.6404	0.03197	9
D	N	DTWCLE	DTW	CLE	Feb-00	205	19,492.47	75.1405	0.0398	10
D	N	CLECMH	CLE	CMH	Feb-00	193	21,806.05	83.71405	0.03369	11
D	N	SFOSMF	SFO	SMF	Feb-00	191	16,379.13	61.95882	0.04194	12
D	N	SMFSFO	SMF	SFO	Feb-00	187	16,036.11	61.44982	0.04229	13
D	N	ATLPFN	ATL	PFN	Feb-00	185	45,779.64	183.2523	0.02046	14
D	N	TULDFW	TUL	DFW	Feb-00	182	43,220.18	174.8431	0.0357	15
D	N	CMHCLE	CMH	CLE	Feb-00	182	20,563.22	86.91131	0.0321	15
D	N	IAHDFW	IAH	DFW	Feb-00	170	38,227.75	170.636	0.03993	17
D	N	DFWTUL	DFW	TUL	Feb-00	156	37,045.87	181.1497	0.03389	18
D	N	ILMATL	ILM	ATL	Feb-00	151	56,981.16	302.3868	0.03365	19
D	N	ROAATL	ROA	ATL	Feb-00	150	53,599.07	293.0082	0.02674	20
D	N	MIARSW	MIA	RSW	Feb-00	146	16,810.08	83.59298	0.02557	21
D	N	ICTDFW	ICT	DFW	Feb-00	143	47,094.93	262.5469	0.03791	22
D	N	DFWICT	DFW	ICT	Feb-00	141	46,436.26	259.2639	0.03841	23
D	N	ATLGNV	ATL	GNV	Feb-00	138	41,551.90	211.6433	0.02178	24
D	N	BOSJFK	BOS	JFK	Feb-00	134	25,126.15	134.3345	0.04274	25
D	N	DFWIAH	DFW	IAH	Feb-00	133	29,907.59	175.8375	0.03875	26
D	N	SANLAX	SAN	LAX	Feb-00	132	14,474.91	85.56678	0.03817	27
D	N	ATLILM	ATL	ILM	Feb-00	130	49,056.63	296.0814	0.03177	28
D	N	MIAEYW	MIA	EYW	Feb-00	130	16,493.98	97.59754	0.02715	28
D	N	ATLCRW	ATL	CRW	Feb-00	125	45,465.76	276.4318	0.03987	30
D	N	DFWHOU	DFW	HOU	Feb-00	125	30,932.03	201.9243	0.03249	30
D	N	RSWMIA	RSW	MIA	Feb-00	123	14,161.91	87.99126	0.02376	32
D	N	CLEBUF	CLE	BUF	Feb-00	123	23,506.67	144.4986	0.03381	32
D	N	SEAPDX	SEA	PDX	Feb-00	121	15,718.58	91.256	0.04314	34
D	N	CRWATL	CRW	ATL	Feb-00	121	44,010.86	264.5281	0.04167	34
D	N	EYWMIA	EYW	MIA	Feb-00	118	14,971.46	101.0714	0.02615	36
D	N	SLCGJT	SLC	GJT	Feb-00	118	25,512.77	163.0736	0.04018	36
D	N	JFKBOS	JFK	BOS	Feb-00	115	21,563.49	145.1154	0.03906	38
D	N	RAPDEN	RAP	DEN	Feb-00	114	34,447.29	241.2052	0.04041	39
D	N	PITJFK	PIT	JFK	Feb-00	114	38,650.96	288.4844	0.03582	39
D	N	ATLMYR	ATL	MYR	Feb-00	113	35,780.61	212.9632	0.02253	41
D	N	ATLDHN	ATL	DHN	Feb-00	113	19,308.51	143.6533	0.02952	41
D	N	LAXSAN	LAX	SAN	Feb-00	111	12,172.08	87.9243	0.03714	43
D	N	GJTSLC	GJT	SLC	Feb-00	110	23,783.09	169.0368	0.03876	44
D	N	DENRAP	DEN	RAP	Feb-00	110	33,238.61	241.7354	0.04032	44
D	N	DHNATL	DHN	ATL	Feb-00	108	18,454.15	142.3932	0.0303	46
D	N	HOUDFW	HOU	DFW	Feb-00	108	26,725.27	199.3397	0.03227	46
D	N	BTVEWR	BTV	EWR	Feb-00	106	28,156.97	213.0066	0.02643	48
D	N	MHTEWR	MHT	EWR	Feb-00	104	21,743.03	146.7494	0.02214	49
D	N	PHLEWR	PHL	EWR	Feb-00	103	8,361.54	60.68796	0.02907	50
D	N	PVDEWR	PVD	EWR	Feb-00	103	16,393.51	106.622	0.02729	50

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Figure 24